RUSH

Access DB# _108686_

SEARCH REQUEST FORM

Scientific and Technical Information Center

94

Requester's Full Name: _FRED EHICHIOYA_   Examiner # : _79719_ Date: _11/19/03_

Art Unit: _2172_   Phone Number 30 _5 - 8039_   Serial Number: _09/836952_

Mail Box and Bldg/Room Location: _4D43_   Results Format Preferred (circle): (PAPER) DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.
****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _SYSTEM AND METHOD FOR PROVIDING CONTEXT-AWARE COMPUTER MANAGEMENT USING SMART IDENTIFICATION BADGES._

Inventors (please provide full names): _MEHRBAN JAM_

Earliest Priority Filing Date: _11/21/03_

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Claims 1, 2, 11, 12

Please concentrate on the underlined words on the above on attached claims.

****

PTO-1590 (8-01)

STIC Database Tracking Number: 108686

TO: Fred Ehichoya
Location: 4D43
Art Unit : 2172
Thursday, November 20, 2003

Case Serial Number: 09/836952

From: David Holloway
Location: EIC 2100
PK2-4B30
Phone: 308-7794

david.holloway@uspto.gov

Search Notes

Dear Examiner Ehichoya,

Attached please find your search results for above-referenced case.
Please contact me if you have any questions or would like a re-focused search.

David

```
Set     Items    Description
S1     165204    BADGE? OR RFID? ? OR BUTTON? OR PIN OR PINS OR FOB OR FOBS
                 OR TOKEN? OR ID OR IDCARD? OR IDENTIFICATION()CARD? OR IDS
S2       3421    S1(3N)(SMART? OR INTELLIGENT? OR CHIP? OR IC OR INTEGRATED-
                 ()CIRCUIT? OR TRANSPONDER?)
S3     1997483   WIRELESS? OR RF  OR RADIOFREQ? OR IR OR INFRARED? OR WIFI -
                 OR WAP OR BLUETOOTH? OR CELLULAR?
S4     2890183   ACCESS? OR CLEARANCE? OR PERMISSION? OR PERMIT? OR ALLOW?
S5      575357   (MULTIPL? OR SEVERAL OR VARIOUS OR VARIETY OR MANY OR PLUR-
                 AL?)(3N)(LEVEL? OR TIER? OR TYPE?) OR MULTILEVEL? OR MULTILAY-
                 ER?
S6    15114245   NETWORK? OR SYSTEM? OR LAN? OR DATABASE? OR DATA()(BASE? OR
                 BANK?) OR DATABANK? OR WEBSITE? OR WEBPAGE? OR WEB()(SITE? OR
                 PAGE?) OR INTRANET?
S7      517575   BEACON? OR TRANSMITTER? OR TRANSPONDER? OR ANTENNA? OR REC-
                 EIVER?
S8           3   S2 AND S3 AND S4 AND S5
S9          71   S2 AND S3 AND S7
S10          1   S9 AND S5
S11         45   S9 AND S6
S12         56   S2 AND S3 AND S4
S13          0   S2 AND S4(2N)S5
S14         12   S4 AND S9
S15         38   S12 AND (ACCESS? OR AUTHORI? OR PERMISSION? OR SECURE? OR -
                 SECURI?)
S16         83   S8 OR S10 OR S11 OR S14 OR S15
S17         62   RD (unique items)
S18         39   S17 NOT PY>20001
S19         39   S18 NOT PD>20010417
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         (c) 2003 The Gale Group
File   233:Internet & Personal Comp. Abs. 1981-2003/Jul
         (c) 2003, EBSCO Pub.
File   144:Pascal 1973-2003/Nov W2
         (c) 2003 INIST/CNRS
File   434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
File    34:SciSearch(R) Cited Ref Sci 1990-2003/Nov W3
         (c) 2003 Inst for Sci Info
File    62:SPIN(R) 1975-2003/Oct W1
         (c) 2003 American Institute of Physics
```

05448093   E.I. No: EIP99124954740
   Title: 13.56MHz CMOS RF **identification** transponder **integrated circuit with a dedicated CPU**
   Author: Masui, Shoichi; Ishii, Eiichi; Iwawaki, Takanori; Sugawara, Yoshikazu; Sawada, Kikuzo
   Corporate Source: Nippon Steel Corp, Kanagawa, Jpn
   Conference Title: Proceedings of the 1999 46th IEEE International Solid-State Circuits Conference (ISSCC'99)
   Conference Location: San Francisco, CA, USA Conference Date: 19990215-19990217
   E.I. Conference No.: 55474
   Source: Digest of Technical Papers - IEEE International Solid-State Circuits Conference 1999. p 162-163
   Publication Year: 1999
   CODEN: DTPCDE   ISSN: 0193-6530
   Language: English
   Document Type: JA; (Journal Article)   Treatment: X; (Experimental)
   Journal Announcement: 0002W2

   Abstract: The advent of radio-frequency identification technology (RFID) spells expectations of higher data rates in present **systems** . Complex functions, such as anti-collision and authentication, are indispensable in **transponder** ICs despite the fact that their addition increases power consumption. To achieve the high data rate with high magnetic field emission from interrogators, the 13.56MHz ISM band is appropriate for **RF** power and data transmission. These **RF** and analog circuits for a 13.56MHz **RFID transponder IC** are associated clocking and anti-collision techniques controlled by a dedicated CPU. 2 Refs.
   Descriptors: **Transponders** ; CMOS integrated circuits; Radio **systems** ; Radio transmission; Demodulation; Modulation; Data transfer; PROM; Electric rectifiers; MOSFET devices
   Identifiers: Radio frequency identification technology; Central processing unit; Anticollision techniques; Interrogators; Half duplex transmission mode; Input output registers; Electrically erasable PROM; Power dissipation
   Classification Codes:
   716.3 (Radio Systems & Equipment); 714.2 (Semiconductor Devices & Integrated Circuits); 723.2 (Data Processing); 722.1 (Data Storage, Equipment & Techniques); 713.5 (Other Electronic Circuits); 701.2 (Magnetism: Basic Concepts & Phenomena)
   716 (Radar, Radio & TV Electronic Equipment); 714 (Electronic Components); 723 (Computer Software); 722 (Computer Hardware); 713 (Electronic Circuits); 701 (Electricity & Magnetism)
   71 (ELECTRONICS & COMMUNICATIONS); 72 (COMPUTERS & DATA PROCESSING); 70 (ELECTRICAL ENGINEERING)

19/5/5   (Item 5 from file: 8)
DIALOG(R)File   8:Ei Compendex(R)
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04846868   E.I. No: EIP97103856857
   Title: Energy-conserving access **protocol for** wireless **communication**
   Author: Chlamtac, Imrich; Petrioli, Chiara; Redi, Jason
   Corporate Source: Boston Univ, MA, USA
   Conference   Title: Proceedings of the 1997 IEEE International Conference
on Communications, ICC. Part 2 (of 3)
   Conference Location: Montreal, Can   Conference Date: 19970608-19970612
   Sponsor: IEEE
   E.I. Conference No.: 47077
   Source: IEEE   International Conference on Communications v 2 1997. IEEE,
Piscataway, NJ, USA,97CB36067. p 1059-1062
   Publication Year: 1997
   CODEN: 002115
   Language: English
   Document Type: CA; (Conference Article)   Treatment: T; (Theoretical)
   Journal Announcement: 9712W1

   Abstract: A myriad of applications such as radio frequency identification
(**RFID**) and **smart** card networks are emerging in which nodes are designed
for extremely low-cost, large scale applications such that the replacement
of batteries is not feasible. Energy conservation therefore becomes a major
constraint. Classical **access** protocols are either not energy conserving
or lead to unacceptable delays. In this paper, we propose a communication
protocol which meets the energy constraints while yielding low **access**
delays. (Author abstract) 5 Refs.
   Descriptors: *Network protocols; Radio communication; Smart cards; Energy
conservation
   Identifiers: Energy conserving **access** protocol; **Radiofrequency**
identification
   Classification Codes:
   722.3 (Data Communication, Equipment & Techniques); 525.2   (Energy
Conservation)
   723 (Computer Software); 716 (Radar, Radio & TV Electronic Equipment);
722 (Computer Hardware); 525 (Energy Management)
   72 (COMPUTERS & DATA PROCESSING); 71 (ELECTRONICS & COMMUNICATIONS); 52
 (FUEL TECHNOLOGY)

04064133   E.I. No: EIP95022562601
  Title: RFID **tags connect** smart **cars to smart highways**
  Author: Legg, Gary
  Source: EDN v 39 n 26 Dec 22 1994. p 33-36
  Publication Year: 1994
  CODEN: EDNSBH   ISSN: 0012-7515
  Language: English
  Document Type: JA; (Journal Article)   Treatment: G; (General Review)
  Journal Announcement: 9504W3
  Abstract: To solve the heavy traffic on California State Route 91, the
highways are getting help from electronics to deal with situation. A year
from now, part of SR-91 will be a 'smart' highway, maintaining automatic,
two-way electronic communication with cars to help traffic flow more
smoothly. Cars on Sr-91 will be smart, too, because of a simple
communication device called an RFID tag. When the SR-91 control **system**
queries them, the RFID tags act simply as tranponders that send short,
unique codes. The **system** can electronically collect prepaid tolls,
eliminating the need for motorists to stop or even slowdown at toll booths.
Traffic will move more quickly, fuel economy will improve, and pollutants
will decrease. 1 Refs.
  Descriptors: Identification (control **systems**); Telecommunication links;
Intelligent vehicle highway **systems** ; Automobiles; Information services;
Antennas ; Highway traffic control; **Transponders** ; Data communication
systems ; **Network** protocols
  Identifiers: **RF** identification tags; Smart cars; Smart highways
  Classification Codes:
  731.2 (Control System Applications); 722.3 (Data Communication,
Equipment & Techniques); 406.2 (Roads & Streets); 662.1 (Automobiles);
903.4 (Information Services); 715.2 (Industrial Electronic Equipment)
  731 (Automatic Control Principles); 722 (Computer Hardware); 406
(Highway Engineering); 662 (Automotive Design & Manufacture); 903
(Information Science); 715 (General Electronic Equipment)
  73 (CONTROL ENGINEERING); 72 (COMPUTERS & DATA PROCESSING); 66
(AUTOMOTIVE ENGINEERING); 90 (GENERAL ENGINEERING); 71 (ELECTRONICS &
COMMUNICATIONS)

DIALOG(R)File   8:Ei Compendex(R)
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02808921   E.I. Monthly No: EIM8910-038141
   Title: Short range UHF telemetry system **using passive** transponders
for vehicle ID **and status information.**
   Author: Koelle, Alfred R.
   Corporate Source: AMTECH Technology Corp, Sante Fe, NM, USA
   Conference Title: IEEE Workshop on Automotive Applications of Electronics
- 1988
   Conference Location: Dearborn, MI, USA
   Sponsor: IEEE; Industrial Electronics Society; Vehicular Technology
Society
   E.I. Conference No.: 12253
   Source: IEEE Workshop Automot Appl Electron 1988 IEEE. Publ by IEEE, IEEE
Service Center, Piscataway, NJ, USA. Available from IEEE Service Cent (cat
n 88TH0231), Piscataway, NJ, USA. p 34-38
   Publication Year: 1988
   Language: English
   Document Type: PA; (Conference Paper)   Treatment: A; (Applications); X;
(Experimental)
   Journal Announcement: 8910
   Abstract: An electronic tag and reader **system** using modulated
backscatter at 915 MHz or 2450 MHz is described which has a reading range
from several centimeters to tens of meters, reads a 128-bit message in 30
ms, can read tags in motion, and discriminates between tags in the field of
view by proximity. It is concluded that this electronic ID **system** can now
be used for the automatic identification of vehicles. This **system** uses
high-frequency **RF** signals to read remotely an electronically coded ID or
other message from a tag mounted to the vehicle (or other object to be
identified), whether the vehicle is stationary or moving. It has been
tested on trucks, railway cars, intermodal containers, and automobiles to
perform quickly, inexpensively, and reliably tasks that until now were done
by human operators.
   Descriptors: AUTOMOBILES--*Electronic Equipment; TELEMETERING **SYSTEMS** ;
TRANSPONDERS
   Identifiers: UHF TELEMETRY; PASSIVE **TRANSPONDERS** ; ELECTRONIC TAG;
ELECTRONIC 1D **SYSTEM** ; AUTOMATIC IDENTIFICATION
   Classification Codes:
   662 (Automotive Design & Manufacture); 715 (General Electronic
Equipment); 716 (Radar, Radio & TV Electronic Equipment); 718 (Telephone
& Line Communications)
   66 (AUTOMOTIVE ENGINEERING); 71 (ELECTRONICS & COMMUNICATIONS)

6230427   INSPEC   Abstract   Number: A1999-11-8780-003, B1999-06-7510J-009,
C1999-06-7330-052
   Title: A novel computerized system **for analyzing motor and social
behavior in groups of animals**
   Author(s): Vatine, J.-J.; Ratner, A.; Dvorkin, M.; Seltzer, Z.
   Author Affiliation: Dept. of Phys. Med. & Rehabilitation, Hadassah Univ.
Hosp., Jerusalem, Israel
   Journal: Journal of Neuroscience Methods   vol.85, no.1   p.1-11
   Publisher: Elsevier,
   Publication Date: 1 Nov. 1998 Country of Publication: Netherlands
   CODEN: JNMEDT ISSN: 0165-0270
   SICI: 0165-0270(19981101)85:1L.1:NCSA;1-#
   Material Identity Number: J327-1998-013
   U.S. Copyright Clearance Center Code: 0165-0270/98/$19.00
   Language: English   Document Type: Journal Paper (JP)
   Treatment: Practical (P); Experimental (X)
   Abstract: The authors present here the VMB Tracking **System** , a novel
method for tracking locomotor activity, posture, thigmotactic scanning
behavior and social interactions of up to 8 animals at a time, at a high
resolution (up to +or-0.1 mm). The authors used a commercially available
computerized **system** that is considerably cheaper than other available
methods. This **system** utilizes a basic personal computer controlling 3
transponders (`towers') fixed in space above the tested area, where
animals as small as rats stroll freely in their normal habitat or in an
experimental arena. Each tower emits infra-red (**IR**) pulses to a
transponder (` **button** ') adhered to a plastic mount glued to a shaved
area of skin on the animal's back. When the button detects the **IR** pulses
it responds with a button-specific ultrasonic signal that is fed back to
the towers. The 3D location of the buttons is calculated by triangulation.
Movement parameters of each button, such as displacement trajectory, time,
speed and acceleration, can be displayed on-line and stored for off-line
analysis. This **system** can be used to track animals in any lighting
conditions, and to assess drug effects on the CNS, neuromuscular junction
or muscle. As an example the authors demonstrate the ataxic effects of
pentobarbital in rats. (19 Refs)
   Subfile: A B C
   Descriptors: biological techniques; biology computing; biomechanics;
microcomputer applications; optical tracking; **transponders**
   Identifiers: social behavior; animal groups; VMB Tracking **System** ;
locomotor activity; posture; thigmotactic scanning behavior; social
interactions; basic personal computer; rats; normal habitat; experimental
arena; infra-red pulses; shaved skin area; button-specific ultrasonic
signal; biological research instrumentation; off-line analysis; drug
effects assessment; movement parameters; neuromuscular junction; muscle;
CNS; ataxic effects; pentobarbital
   Class Codes: A8780 (Biophysical instrumentation and techniques); A8745D
(Physics of body movements); B7510J (Optical and laser radiation
(biomedical imaging/measurement)); C7330 (Biology and medical computing)

5978964   INSPEC Abstract Number: B9809-6210L-023, C9809-5620W-014
  Title: Using location and environment awareness in mobile communications
  Author(s): Beadle, H.W.P.; Maguire, C.Q., Jr.; Smith, M.T.
  Author Affiliation: The Inst. for Telecommun. Res., Wollongong Univ.,
NSW, Australia
  Conference Title: Proceedings of ICICS, 1997 International Conference on
Information, Communications and Signal Processing. Theme: Trends in
Information Systems Engineering and Wireless Multimedia Communications
(Cat. No.97TH8237)   Part vol.3   p.1781-5 vol.3
  Publisher: IEEE, New York, NY, USA
  Publication Date: 1997 Country of Publication: USA   3 vol. xxxiv+1819
pp.
  ISBN: 0 7803 3676 3   Material Identity Number: XX98-00188
  U.S. Copyright Clearance Center Code: 0 7803 3676 3/97/$10.00
  Conference Title: Proceedings of 1st International Conference on
Information Communications and Signal Processing
  Conference Date: 9-12 Sept. 1997   Conference Location: Singapore
  Language: English   Document Type: Conference Paper (PA)
  Treatment: Applications (A); Practical (P)
  Abstract: We are investigating the use of badge based wearable computers
to create highly mobile location and environment aware systems. When
coupled to **intelligent** servers the **badges** provide an unparalleled
platform for human centred information environments. This paper describes
the architecture of the badge, its distributed computing environment, and
presents initial results of application development trials conducted by a
class of telecommunications students at KTH.   (21 Refs)
  Subfile: B C
  Descriptors: **access** control; computer architecture; distributed
processing; Internet; mobile communication; optical communication; portable
computers
  Identifiers: environment awareness; location awareness; mobile
communications; badge based wearable computers; intelligent servers; human
centred information environments; network architecture; distributed
computing; KTH; mobile computing; **access** control system; **IR** technology;
Internet
  Class Codes: B6210L (Computer communications); B6260 (Optical links and
equipment); C5620W (Other computer networks); C5430 (Microcomputers)

5860285
Title: ID busts perceptions: crucial tech advances
 Author(s): Zalud, B.
 Journal: Security   vol.35, no.1   p.55
 Publisher: Cahners Publishing,
 Publication Date: Jan. 1998 Country of Publication: USA
 CODEN: SECUEU ISSN: 0890-8826
 SICI: 0890-8826(199801)35:1L.55:BPCT;1-U
 Material Identity Number: K674-98003
 Language: English   Document Type: Journal Paper (JP)
 Treatment: Economic aspects (E)
 Abstract: Overcoming a perception of student IDs, drivers licenses and factory badges, identification cards have become a crucial **security** element. All types of organizations now use more photo ID cards and badges, and they are more often part of an integrated **security** approach. Automated ID systems will evolve from emerging to established technology, driven in great part by radio frequency and magnetic identification, **ID** -enabled **smart** card, product source tagging and higher **security** features. (0 Refs)
 Subfile: D
 Descriptors: biometrics (**access** control); identification; smart cards
 Identifiers: identification cards; photo ID cards; photo ID badges; integrated **security** approach; automated ID systems; **radiofrequency** identification; magnetic identification; **ID** -enabled **smart** card; product source tagging
 Class Codes: D1060 (Security)

19/5/27   (Item 11 from file: 2)
DIALOG(R)File   2:INSPEC
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4887461
Title: Keeping intruders out (high security   access **control)**
 Journal: Banking World   vol.13, no.2   p.18-19
 Publication Date: Feb. 1995 Country of Publication: UK
 CODEN: BAWOEX ISSN: 0737-6413
 Language: English   Document Type: Journal Paper (JP)
 Treatment: Practical (P)

 Abstract: Banks   and   other   institutions   seeking   to   ensure that only
authorised personnel obtain entry to high **security** premises are now
exploring contactless chip technology. The principle is straightforward.
The   **chip**   (on a keyring, **badge** or card) carries a small radio frequency
" **transponder** "; when the **transponder** is interrogated by a terminal at
the   entrance to the building it transmits the appropriate encoded data to
establish the entrant's identity. **Radiofrequency** identification (**RF** -ID)
technology is usually supplied in the form of "tags" (or "badges") worn by
employees. Financial institutions seeking to control **access** to high
security premises-typically computer installations-may find it rewarding
to go far afield for the contactless technology they are seeking. Tag
technology is now being incorporated by several suppliers into cards which
have the dimensions of a standard bank or credit card; such a card can
carry more information than just the tag; this extra information can
include the employee's name (printed in clear) and a photograph.
Contactless chip technology is just the latest in a line of electronic
devices used to provide **access** control. The different technologies on
offer vary considerably in cost; the decision on which **system** to adopt is
by no means an easy one. (0 Refs)
  Subfile: D
  Descriptors: **access** control; banking
  Identifiers: high **security**   **access** control devices; intruders; high
security premises; **security** devices; contactless chip technology; radio
frequency **transponder** ; encoded data; **radiofrequency** identification
technology; tags; badge; proximity terminals; financial institutions;
computer installations; Westinghouse **Security** Electronics;
multi-technology **RF** -ID cards; QuadraKey card; magnetic stripe; photo ID;
bar code; reading range; cost
  Class Codes: D1060 (Security); D3035 (Monitoring and alarm systems);
D2050E (Banking)
  Copyright 1995, IEE

4494639   INSPEC Abstract Number: B9311-6250-034
 Title: A low power RD ID   transponder
  Author(s): Page, R.

  Author Affiliation: Wenzel Associates, Austin, TX, USA

  Abstract: The author describes the design, operation and application of a
low-power **RF** identification **transponder** . The simple design is spectrum
friendly,   requiring   minimal   interrogation   power   and   **allows**   easy
conversion to spread spectrum without modification to the **transponder** .
Designed with one inexpensive microwave part on a single piece of FR-4
substrate,   component   and   manufacturing costs are kept down, potentially
opening up markets served exclusively by bar coding technology. Other uses
include   automatic   tolling,   inventory   tracking   and   military   vehicle
 security .   (3 Refs)
  Subfile: B
  Descriptors: identification; microwave links; radio equipment;
transponders
  Identifiers: low power; RD **ID   transponder** ; identification;
interrogation power; microwave part; FR-4 substrate; automatic tolling;
inventory tracking; military vehicle **security**
  Class Codes: B6250 (Radio links and equipment)

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5978964   INSPEC Abstract Number: B9809-6210L-023, C9809-5620W-014
  Title: Using location and environment awareness in mobile communications
  Author(s): Beadle, H.W.P.; Maguire, C.Q., Jr.; Smith, M.T.
  Author Affiliation: The Inst. for Telecommun. Res., Wollongong Univ.,
NSW, Australia
  Conference Title: Proceedings of ICICS, 1997 International Conference on
Information, Communications and Signal Processing. Theme: Trends in
Information Systems Engineering and Wireless Multimedia Communications
(Cat. No.97TH8237)   Part vol.3   p.1781-5 vol.3
  Publisher: IEEE, New York, NY, USA
  Publication Date: 1997 Country of Publication: USA   3 vol. xxxiv+1819
pp.
  ISBN: 0 7803 3676 3   Material Identity Number: XX98-00188
  U.S. Copyright Clearance Center Code: 0 7803 3676 3/97/$10.00
  Conference Title: Proceedings of 1st International Conference on
Information Communications and Signal Processing
  Conference Date: 9-12 Sept. 1997   Conference Location: Singapore
  Language: English   Document Type: Conference Paper (PA)
  Treatment: Applications (A); Practical (P)
  Abstract: We are investigating the use of badge based wearable computers
to create highly mobile location and environment aware systems. When
coupled to **intelligent** servers the **badges** provide an unparalleled
platform for human centred information environments. This paper describes
the architecture of the badge, its distributed computing environment, and
presents initial results of application development trials conducted by a
class of telecommunications students at KTH.   (21 Refs)
  Subfile: B C
  Descriptors: **access** control; computer architecture; distributed
processing; Internet; mobile communication; optical communication; portable
computers
  Identifiers: environment awareness; location awareness; mobile
communications; badge based wearable computers; intelligent servers; human
centred information environments; network architecture; distributed
computing; KTH; mobile computing; **access** control system; IR technology;
Internet
  Class Codes: B6210L (Computer communications); B6260 (Optical links and
equipment); C5620W (Other computer networks); C5430 (Microcomputers)

Fred E.

305 - 8039

Using Location and Environment Awareness in Mobile Communications

H. W. Peter Beadle

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msmith@hpl.hp.com

Abstract: *We are investigating the use of Badge based wearable computers to create highly mobile location and environment aware systems. When coupled to intelligent servers the Badges provide an unparalleled platform for human centred information environments.*

This paper describes the architecture of the Badge, its distributed computing environment, and presents initial results of application development trials conducted by a class of Telecommunications students at KTH.

Keywords: *badge, location dependent, location aware, location tracking, mobile computing, user trials.*

1. Background

A badge is a culturally evolved identification and access control system. Wearing a badge identifies you as part of a group and may confer rank and privilege upon the wearer. Until recently badges were passive and identification and access control was performed by other humans. Badges then started to evolve and acquired images, names, bar codes, magnetic stripes, and finally microprocessors and various types of transponders. Perhaps the first truly active badge was the one developed at the Olivetti Oracle Cambridge Research Lab [ORL] which transmitted its identity using an infrared data link. The Active Badge™ has since been employed in building access control, tracking equipment and personnel, and controlling desktop computer environments. The ORL Badges were further developed by Xerox PARC into other forms of Ubiquitous Computing [UBI].

Badges have evolved to make access control and authentication easier. We believe that computer and sensor augmented badges can also act as user interaction devices providing a convenient human-centred way for people to interact with the ever expanding computing and communications environment they find themselves immersed in. Most importantly a Badge provides the last link in the computing and communications environment allowing the "system" to know where the user is and what the environment is like at that location rather than just the network addresses of the user's computing and communication peripherals.

2. Badges

To be viable a badge must be small, light and convenient to wear. A computationally and environmentally augmented badge has some additional features and requirements that contribute to its design:

- long battery life
- short, predictable transmission range
- privacy and security
- interoperability with other office and domestic devices
- provides useful environmental indicators

These requirements have led us to design a Badge based on industry standard IrDA infrared technology. Infrared signals do not travel through building walls and the IrDA IrLAP protocol is designed to be robust in the presence of interference and multi-path effects. This gives the Badge a line-of-site transmission range of 1 meter, and a viewing angle of approximately 30°. Thus if a sensor detects the Badges signal it knows the badge wearers location with reasonable accuracy. Location can also be sensed from the environment using techniques like GPS. Unfortunately most of these techniques either don't work indoors or don't provide enough accuracy on their own to be able to state that a badge wearer is co-located with a piece of equipment in an office or domestic setting. Hence we use the Badge as

an infrared beacon system to provide adjacency based location information.

Power consumption must be low so the Badge can be worn for long periods without the inconvenience of changing the batteries. The desire for low power consumption also dictates that Badge transmissions should be relatively fast as transmission is the main use of power in the system.

Alternate technologies are available including ultrasound, near-field and radio frequency transceivers and RFID tags. However, none of these systems offers the combination of transmission range, speed and volume production available from infrared technology.

With these constraints in mind we have developed a hierarchy of Badges based on mass production IrDA components and domestic appliance microcontrollers.

2.1 Dumb Badge

A Dumb Badge simply transmits its ID number either spontaneously or upon request. Dumb badge technology is available using infrared techniques. Early devices from the Olivetti Oracle Cambridge Research Lab could be classed as Dumb Badges as they only transmitted their identity at regular intervals and included data from push-buttons on the badge.

2.2 Smart Badge

A Smart Badge is a Dumb Badge with a collection of sensors and actuators and reprogramability added. The sensors provide environmental information about the wearer's location. The actuators can send messages to the wearer or control the environment. The reprogramability allows us to implement security features.
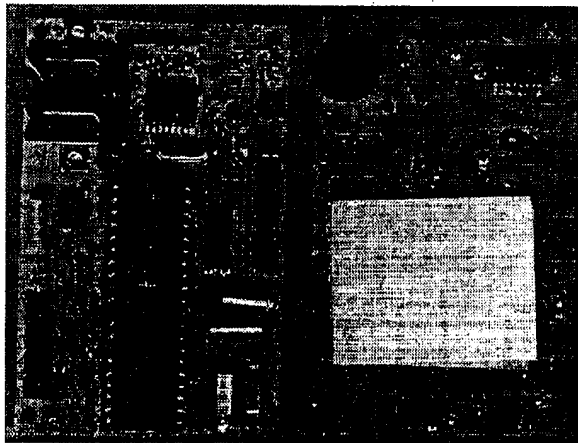

Figure 1 Smart Badge. Back View(processor side) and Front View(Velcro patch for user photograph).

The current prototype is based on a PIC microcontroller and has sensors for light, temperature, humidity, orientation and sound. A piezoelectric transducer acts as an actuator and an 8 bit parallel data I/O path is provided. The combination of 2D orientation sensors and light sensor allow the Smart Badge to act as a mouse or joy-stick for simple positioning

tasks. The I/O port allows the Smart Badge to control its environment. Typically the port would be used to interface to an attached computing device, telephone, or GPS system. It can also be used to control light, doors, air conditioning, heating, ventilation, etc.

The badge uses IrLAP format message framing to be compatible with the emerging IrDA infrastructure. SmartBadge transmits a 30 byte data frame at 9600 baud every 3.3 seconds. The frame is encapsulated in an IrLAP frame to allow easy extensibility, simplifying the construction of Badge Servers to interpret and act upon the received data.

Figure 1 show Photographs of the prototype Smart Badge. The front and rear plastic panels have been removed to show the components. A cosmetic face plate attaches to the front of the badge with Velcro to provide a photo of the wearer, a name, identity number and bar code can also be provided for backward compatibility.

3. Intelligent Badge

The Smart Badge provided the Dumb Badge with a sensors allowing it to discover its physical environment. The Intelligent Badge provides all the features of the Smart Badge with enhanced I/O capability. While it is tempting to think of I/O capability as an LCD screen and a miniature icon based desktop this is not necessarily the best way to extend the badges capabilities. Equally valid extensions use audio, video, animation, and motion to interact with devices and the computing environment.
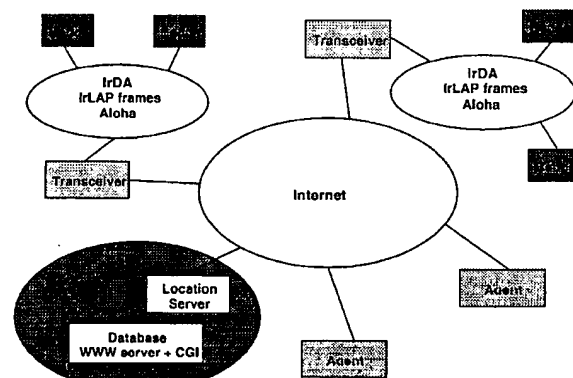
Figure 2 Badge Network Architecture.

The Intelligent Badge aims to be a platform to present a device's user interface to the user in a customisable human-centred way. A simple example is a photocopier, when the user approaches the copier the copier's agent notices the co-location of the wearer and the copier, it then arranges for the copier's user interface to be presented on the wearers Intelligent Badge. The actual format of the interface is determined by the wearer, thus allowing a consistent interface (language, colour, modalities, etc.) to be constructed to all devices. The photocopier's interface could equally well be presented as desktop icons, animated characters, or speech prompts - depending on the badge

user's preferences. An Intelligent Badge acting as an I/O platform allows the wearer to chose the modality and frees the device designer of the need to chose how to present the interface to the user. All the designer needs to do is present the in a structured way to the network using techniques for telecommunications and distributed processing work (e.g., CORBA).

4. Prototype Software and Hardware Architecture

The Badge Network Architecture is shown in Figure 2. Badges send IrDA frames to transceivers. A transceiver acts as a gateway between the Infrared media and the Internet. It parses IrDA frames, breaks out the Badge specific data and forwards it across the Internet in an IP packet to a Location Server for storage and further processing. The Transceiver buffers incoming frames from the Internet destined for Badges until a message is received from the destination Badge. The buffered message is then transmitted to the Badge during its listening window. Buffered frames are timed out if the destination Badge is not sited for a period of time. Program to Badge messaging is performed by multicasting messages to all transceivers near the last known position of the Badge in the hope that one of the transceivers will identify the Badge and forward the message. A security architecture is also needed for the badge to preserve Badge wearers privacy. A discussion of the security architecture can be found in [BEA97c].

5. User Trials

Ten prototype Smart Badges and ten Badge Transceivers have been constructed and are currently in use in an Engineering course on Mobile Computing at KTH. In the course the students are using the Badges to provide a Location and Environment aware mobile infrastructure and then build novel mobile computing application using the infrastructure. Five example applications are being constructed with a fifth application left to the imagination of the student groups. The four example applications are typical of the application of location aware mobile computers.

5.1 Smart Door and Smart Room

A basic use of a SmartBadge and a fixed Badge Transceiver is to provide access to controlled environments by acting like a door lock and a key. A Door Agent program can be constructed that is responsible for the security of a door or group of doors. The Door Agent queries the Location Server database, either through polling or by using call-backs. Once the Door Agent has detected an authorised person at a particular door it sends a message to the door to make it open.

A SmartBadge and a network of fixed Badge Transceivers make it possible to track a persons movements around a building or larger environment. With the ability to track comes the ability to log the location data and analyse it. A Smart Room can be constructed by analysing location data for a room and extracting useful spatial and temporal

correlations from it. The correlations can then be used by a Room Agent to control the workstations, door, lighting and environmental controls. The Room Agent could:

Turn on the overall room lights and adjusting the room temperature just before the first occupant arrives for the day.

Turn off the lighting, turning down the temperature and shutting down and turning off all computers just after the last occupant has gone for the day.

Turn task lighting off and on as occupants move during the day enabling screen-lock and monitor power-down when a computer workstation user moves away from the workstation for a prolonged period (e.g. lunch).

Adjusting the room environment so that all the occupants are as close to 20 degrees and 70% humidity as possible.

Report room energy trends to a Building Agent which can then optimise the building energy usage and report building patterns to the Power Company to help them optimise their production.
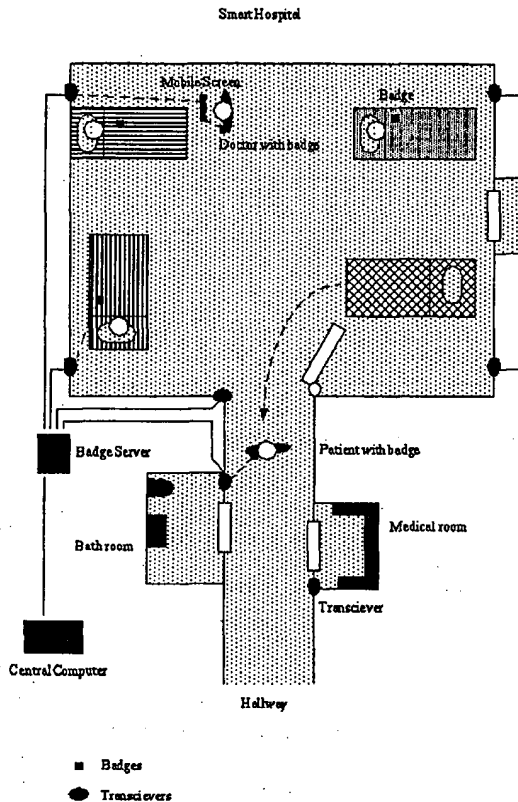
Two extension to the Smart Room and Smart Door scenarios were developed by a student groups, Date IT is a location augmented dating service, Smart Hospital is a Badge augmented medical environment.

Date IT [BJE97] is a computer match-making system with location aware augmentation. The service itself provides mutual matching of members wearing badges, using a shared database and a transceiver infrastructure. A meeting between matching customers results in a signal to both badges, making them beep. The service is designed to be deployed under license in clubs and bars which also provide and information station to fill in the personal profile needed by the service. The information station (and WWW based database) can point the customer to bars and clubs with a high number of potential matches and can also be used to point out the location of potential matches within a room.

Smart Hospital [LAR97] (Figure 3) aims to improve information flows in hospitals. The system is based on displayed on a pen sensitive screen that works as an access point between the doctor, the patient and a central computer. The central computer stores hospital records and provides authentication and access control services. Patients are equipped with badges that report their current location to the system, have a panic button to summon help, and monitor biometric information like temperature, respiration and heart rate. The badges also provide access to smart doors to prevent patients (and staff) from entering restricted areas. The scheme can also be used to track the spread of infection or contamination be recording where people went, who they met and who else was near bye. An example of the systems use would be for an accident patient needing an X-Ray diagnosis. When the patient is admitted they are equipped with a badge. As the patient moves through the hospital each person that sees them and each procedure that is performed generates data in the central computer. The system allows the patients identity to be recorded along with

the procedure results. When a doctor visits the patient in a ward the patients records are immediately available on the doctors hand-held screen. The system not only improves patient care but also improves hospital record keeping and streamlines the billing and disbursement process.

A simple extension, discussed in the City Guide system below, is to provide the badge with navigational capability so staff and patients can find their way in a large hospital.

Figure 3 Smart Hospital Scenario

5.2 Diary Agent

An alternative analysis of SmartBadge data involves finding correlations between people rather than between people and machines. A Diary Agent could:

Record all the places the SmartBadge wearer went during the day, how long was spent at the location and who else was at the same location the same time (perhaps this indicates a meeting).

Assuming that a SmartBadge wearer accesses computer files on a single network file system from wherever they happen to be at any particular time during the day, the diary can be augmented with details of the files that were accessed and modified by the wearer during the day.

If the SmartBadge wearer has an online diary file containing their appointments the Diary Agent should correlate the appointment information for badge wearers with the actual

meetings that took place and highlight the missed meetings that need to be rescheduled.

If a meeting (co-location of two wearers) takes place within range of a Badge equipped computer workstation that has a sound (video) input capability then the Diary Agent should be able to record the meeting and add the recording to the diary as a meeting record.

If the Diary Agent has access to PABX call records then they can be included in the diary along with the A party and B party numbers. The diary then contains a record of telephone contacts along with details of where the wearer was when the call occurred. If both parties were wearers then both locations could be recorded.

The Intelligent Fitness Centre, a variation on the diary agent, was devised by one of the student groups. Fitness centre patrons are equipped with a SmartBadge in a wrist-watch form factor. These badges identify the patrons to the fitness centre and to its equipment which has Badge receivers attached and is connected through a local area network. When a patron uses a piece of exercise equipment their exercise profile is loaded into the machine allowing a fully tailored exercise program to be developed for each patron. The system also automates record keeping so performance measurements from the exercise machine can be logged to the patrons database for later analysis. The Badge is also used as an authentication device to bill patrons for their time at the fitness centre and even to control the type music played over the P.A. to match the tastes of the centre's current occupants. A simple extension to the system would integrate biometric sensors on the badge with the Fitness Centres monitoring equipment to provide records of pulse rate and respiration rates that would allow exercise physiologists to better tailor exercise programs to customers performance level and to ensure clients did not over-extert themselves.

5.3 Super Flexible Ubiquitous Monitor

A SmartBadge contains a host of sensors to monitor the wearers environment and provide a limited form of user interaction with the environment. Lancaster University developed a system called the FLexible Ubiquitous Monitor (FLUMP). The monitor can detect who is standing in front of it using Olivetti Active Badge technology and display a page of hypertext based on the persons identity. Unfortunately the only form of interaction with the display was to stand in front of it for a prolonged period which caused FLUMP to cycle through the persons display pages. The sensors included on the SmartBadge allow a Super FLUMP to be created with user interaction provided by the tilt (roll and pitch) information along with the light level information allowing a user to scroll through their information pages laid out in a one or two dimensional space and follow hyperlinks.

After constructing a Super FLUMP the system was extended by students to create Sm@rt Guide and City Guide.

City Guide, is meant to be used by tourist visiting a city or by residents as a replacement for a street map. It can also potentially be used as an electronic entry ticket. The City Guide uses IntelligentBadge like devices incorporating a direction display and a GPS receiver. The system is coupled to Info Stations spread about the city. A customer selects a destination of interest (or a series of them) from an Info Station and the City Guide then navigates the customer through the city to the selected destinations using GPS information. All information and prompts can be displayed in the customers own language. Figure 4 shows mock-ups of the City guide and Info Station displays.

The Sm@rt Guide simplifies the system for use in Exhibition Spaces. In Sm@rt Guide a DumbBadge is used and the direction display is placed in the environment by using a network of Electronic Direction Signs (EDS) like smart street signs. Sm@rt Guide allows customers to be routed around temporary congestion in the Exhibition Space because the path is not pre-loaded into the badge at the Info Station.

The two systems can be easily combined to provide intelligent traffic routing in the City Guide scenario by placing EDS' in the environment (for example at already networked sites like traffic lights and public telephone booths) and then using GPS to navigate between EDS. Each EDS then has the opportunity to upload a new route to the City Guide badge as it passes to avoid short term congestion. It should be noted that the system can be used equally well by pedestrians and motorists.
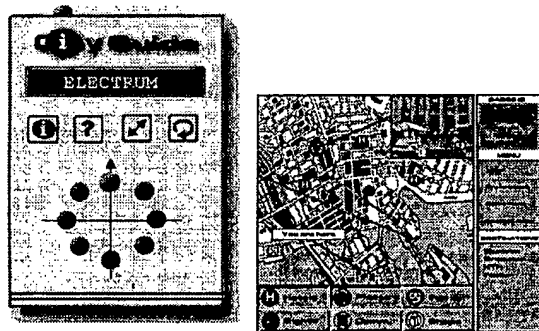

Figure 4City Guide and Info Station

6. Conclusions

This paper has described a SmartBadge that couples an active wearable computer based identification system to a collection of environment sensors. We are using the badge to conduct experiments aimed at producing more human centred computing and communication systems. A trial version of the SmartBadge and its infrastructure has been used by a group of 50 students to prototype innovative location and environment enabled mobile computing applications. Though significant research remains to be performed on the Badge form-factor and the programming techniques needed to realise the large-scale distributed systems typical of the prototype applications, we believe

that the application scenarios show that location aware mobile computing can significantly improvements in human centred information environments.

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4887461
 Title: Keeping intruders out (high security   access **control)**
  Journal: Banking World   vol.13, no.2   p.18-19
  Publication Date: Feb. 1995 Country of Publication: UK
  CODEN: BAWOEX ISSN: 0737-6413
  Language: English   Document Type: Journal Paper (JP)
  Treatment: Practical (P)

  Abstract: Banks and other institutions seeking to ensure that only
 authorised personnel obtain entry to high **security** premises are now
exploring contactless chip technology. The principle is straightforward.
The   **chip**   (on a keyring, **badge** or card) carries a small radio frequency
" **transponder** "; when the **transponder** is interrogated by a terminal at
the entrance to the building it transmits the appropriate encoded data to
establish the entrant's identity. **Radiofrequency** identification (**RF** -ID)
technology is usually supplied in the form of "tags" (or "badges") worn by
employees. Financial institutions seeking to control **access** to high
 security premises-typically computer installations-may find it rewarding
to go far afield for the contactless technology they are seeking. Tag
technology is now being incorporated by several suppliers into cards which
have the dimensions of a standard bank or credit card; such a card can
carry more information than just the tag; this extra information can
include the employee's name (printed in clear) and a photograph.
Contactless chip technology is just the latest in a line of electronic
devices used to provide **access** control. The different technologies on
offer vary considerably in cost; the decision on which **system** to adopt is
by no means an easy one. (0 Refs)
  Subfile: D
  Descriptors: **access** control; banking
  Identifiers: high **security**   **access** control devices; intruders; high
security premises; **security** devices; contactless chip technology; radio
frequency **transponder** ; encoded data; **radiofrequency** identification
technology; tags; badge; proximity terminals; financial institutions;
computer installations; Westinghouse **Security** Electronics;
multi-technology **RF** -ID cards; QuadraKey card; magnetic stripe; photo ID;
bar code; reading range; cost
  Class Codes: D1060 (Security); D3035 (Monitoring and alarm systems);
D2050E (Banking)

Keeping intruders out

Anonymous. **Banking World**. London: Feb 1995. Vol. 13, Iss. 2; pg. 18, 2 pgs

Abstract (Article Summary)

Banks are exploring contactless chip technology to ensure that only authorized personnel gain entry to high-security premises. Radio frequency identification technology is usually supplied in the form of tags or badges worn by employees. Tag technology is now being incorporated by several suppliers into cards that have the dimensions of a standard bank or credit card. Contactless chip technology is just the latest in a line of electronic devices used to provide access control. At the lower end of the cost scale is the magnetic stripe card. Probably the most expensive means of access control is a system based on the smart card, with its built-in microprocessor.

Full Text (1117 words)

BANKS AND OTHER institutions seeking to ensure that only authorised personnel obtain entry to high security premises are now exploring contactless chip technology. The principle is straightforward. The chip (on a keyring, badge or card) carries a small radio frequency "transponder"; when the transponder is interrogated by a terminal at the entrance to the building it transmits the appropriate encoded data to establish the entrant's identity.

Radio frequency identification (RF-ID) technology is usually supplied in the form of "tags" (or "badges") worn by employees. The "proximity" tag can be read at a distance of four to 12 inches between tag and reader, the "hands-free" tag at a distance of up to three feet. Such systems have two big advantages. The readers can be sited to provide minimum interference with the flow of personnel (indeed the proximity terminals can be out-of-sight) and usage places no physical stress on the card.

Financial institutions seeking to control access to high security premises -- typically computer installations -- may find it rewarding to go far afield for the contactless technology they are seeking. Texas Instruments, for instance, has recently installed its TIRIS radio frequency technology in a 24-hour emergency (police, fire, ambulance) centre at Fort Worth, Texas. Employees are issued with badges carrying transponders; these badges are read by remote terminals at the entry doors. The system serves two purposes. First, it ensures that only those who are entitled to be on the premises will gain access. Second, the terminals at the entrances collect data on who is in the building and transmit this information to a central computer.

Tag technology is now being incorporated by several suppliers into cards which have the dimensions of a standard bank or credit card; such a card can carry more information than just the tag; this extra information can include the employee's name (printed in clear) and a photograph.

Westinghouse Security Electronics, for instance, has recently launched a line of multi-technology RF-ID cards; the QuadraKey card can carry RF-ID, magnetic stripe, photo ID and bar code on a single card, with a maximum reading range of three feet.

Contactless chip technology is just the latest in a line of electronic devices used to provide access control. The different technologies on offer vary considerably in cost; the decision on which system to adopt is by no means an easy one.

At the lower end of the cost scale is the magnetic stripe card, which suffers from one defect: the coding can be copied. This problem is being addressed by Thorn Secure Science International, through its Watermark Magnetics technology. This introduces a unique identifier into every length of magnetic tape that is put on a card. The identifier will be read at the terminal, to ensure that only genuine cards can be used to gain entry. Fresh data can still be entered on the cards as and when required.

Another solution is offered by the Wiegand card (supplied through licensees). This type of card uses special embedded magnetic wires, instead of tape; these wires create a pattern which is individually coded for each card. When the card is passed through the reader's magnetic field, small electrical pulses are generated which can then be decoded to represent the card's identity. Security here is very high, because the cards are "hard-wired" and virtually impossible to reproduce. One drawback, however, is that the basic Wiegand card is not easily integrated with other card systems which the company may have installed, for canteens and so on. To meet this problem, Wiegand cards are now being offered with a magnetic stripe.

Probably the most expensive means of access control is a system based on the smart card, with its in-built microprocessor. This type of card can carry large amounts of data and can be used for a variety of purposes -- typically providing a means of entrance to the car park and holding a record of the employee's attendance. The smart card can also serve as a payment card, pre-loaded with value, which can be used at the company's canteens and other facilities.

Smart cards are virtually impossible for the unauthorised to duplicate or re-program; and used with an identification device (ID), they will verify that the person presenting the card is the rightful cardholder.

The most common form of ID is the PIN; but even PINs are sometimes divulged to unauthorised people. To overcome this problem, biometric systems of ID are being introduced. These systems employ terminals which scrutinise a particular personal characteristic when the cardholder presents the card; they then compare this characteristic with a master copy (held on file), which was obtained when the card was originally issued. Such technologies as voice recognition, hand geometry, fingerprints, hand vein checks, retinal eye-scanning and dynamic signature verification are at various stages of development. The idea behind all these systems is that, unlike a PIN, a personal characteristic cannot be presented for identification by anyone except the rightful cardholder.

A very different problem which financial institutions have to face is that of protecting staff from attackers who may enter or even be lying in wait on the premises. The IRIS (Intelligent Radio Information System) is used by NatWest, for instance, as a communication system for employees under attack. The supplier of IRIS, Herne Bay-based EMS Bank Intruder and Fire Systems, has now launched the SAFE? (Status:All-clear for Entry?) system as a complementary security module. SAFE? enables hidden intruder detectors to be connected to the IRIS controller, via radio transmitters or hard-wiring. If these detectors are activated they are logged by the controller, but the activation does not result in any overt alarm. The IRIS controller can be interrogated from up to 250 metres away by means of the SAFE? check unit, a radio transmitter and text message pager. Within five seconds, the pager will receive a "System Clear" message -- or it will display, in order, alarm activations which have been logged, indicating when and where the intrusion took place.

Branch security

Banks and building societies continue to search for effective means to provide security for staff (and of course cash) and for sensitive information.

Staff and cash can be protected by anti-ballistic rising screens. Leasing supplier, Safetell, says that 1,500 screens have been installed in UK branches. These screens foil raids by rising in a fraction of a second, cutting off access to cash and usually forcing the bandit to seek an escape route.

Information displayed on computer screens can be protected from unauthorised eyes by privacy filters. Incoms Systems tells us that the company's Spectrum Secure-View filter not only acts as an anti-glare and anti-static device, but also allows only the operator to see what is on the screen.

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Set      Items    Description
S1       3294     BADGE? OR RFID? ? OR BUTTON? OR FOB OR FOBS OR TOKEN? OR I-
                  DCARD? OR (ID  OR IDENTIFICATION)()(CARD? OR PIN OR PINS) OR -
                  IDS
S2         93     S1(3N)(SMART? OR INTELLIGENT? OR CHIP? OR IC OR INTEGRATED-
                  ()CIRCUIT? OR TRANSPONDER?)
S3       4627     WIRELESS? OR RF  OR RADIOFREQ? OR IR OR INFRARED? OR WIFI -
                  OR WAP OR BLUETOOTH? OR CELLULAR?
S4      48509     ACCESS? OR CLEARANCE? OR PERMISSION? OR PERMIT? OR ALLOW?
S5       2483     (MULTIPL? OR SEVERAL OR VARIOUS OR VARIETY OR MANY OR PLUR-
                  AL?)(3N)(LEVEL? OR TIER? OR TYPE?) OR MULTILEVEL? OR MULTILAY-
                  ER?
S6      86437     NETWORK? OR SYSTEM? OR LAN? OR DATABASE? OR DATA()(BASE? OR
                  BANK?) OR DATABANK? OR WEBSITE? OR WEBPAGE? OR WEB()(SITE? OR
                  PAGE?) OR INTRANET?
S7        718     BEACON? OR TRANSMITTER? OR TRANSPONDER? OR ANTENNA? OR REC-
                  EIVER?
S8          0     S2 AND S3 AND S4 AND S5
S9          4     S2 AND S3 AND S7
S10         0     S9 AND S5
S11         3     S9 AND S6
S12        12     S2 AND S3 AND S4
S13         0     S2 AND S4(2N)S5
S14         0     S2 AND S4 AND S5 AND S7
S15        13     S9 OR S11 OR S12
S16         6     S15 NOT PY>2001
S17         5     S16 NOT PD>20010417
File 256:SoftBase:Reviews,Companies&Prods. 82-2003/Oct
         (c)2003 Info.Sources Inc
```

02322831   DOCUMENT TYPE: Company

Texas Instruments Inc (322831)
12500 TI Blvd
Dallas, TX 75266-4136 United States
TOLL FREE TELEPHONE NUMBER: (800) 336-5236
HOMEPAGE: http://www.TI.com

RECORD TYPE: Directory

CONTACT: Sales Department

ORGANIZATION TYPE: Corporation
EQUITY TYPE: Public
STATUS: Active

NUMBER OF EMPLOYEES: 34,500
SALES: 1,600,000,000

PERSONNEL: Engibous, Tom, Chief Executive Officer; Engibous, Tom,
     Chairperson; Aylesworth, Bill, VP; Aylesworth, Bill, Chief Financial
     Officer; Templeton, Rich, Chief Operating Officer; Leven, Steve, VP;
     Hubach, Joe, VP; Ritter, Phil, VP; West, Terri, VP
REVISION DATE: 20030511

...silicon transistors. Texas Instruments continued its pattern of
innovation, later introducing specialized semiconductors, quantum effect
transmitters , GA components, **infrared** weapons **systems** , **RFID**
equipment, video RAM **chips** , the single-chip DSP, and high-bandwidth
platforms. The company's software offerings include real...

01164224   DOCUMENT TYPE: Product

PRODUCT NAME: Software Developer's Kit (164224)

RF IDeas Inc (645877
290 Lexington Dr
Buffalo Grove, IL 60089 United States
TELEPHONE: (847) 870-1723

RECORD TYPE: Directory

CONTACT: Sales Department

REVISION DATE: 20030630

RF IDeas Inc...

RF IDeas' Software Developer's Kit **allows** developers to add proximity
card and other radio frequency identification (RFID) features to
applications. The...

...The programming kit also offers developers C++ and Visual Basic samples.
Software Developer's Kit **allows** users to create asset tracking, security,
vending, and human resource kiosk applications.

DESCRIPTORS: Building Security; Computer Security; Program Development;
     RFID ;   Smart Cards

01157601   DOCUMENT TYPE: Product

PRODUCT NAME: PowerID Standard & Plus (157601)

Power Paper Ltd (739367)
PO Box 12
Einat 49910, Israel
TELEPHONE: ( ) 972-39007500

RECORD TYPE: Directory

CONTACT: Sales Department

REVISION DATE: 20030817

...Paper's PowerID (TM), offered in Standard and Plus editions, is a radio
frequency identification (**RFID**) **smart** label system that **allows**
organizations to streamline supply chain operations. The product offers
access to a wide range of asset information. PowerID includes long-range
communications, data processing, storage...
...the product works with existing passive label reader systems. PowerID
Plus employs an active micro- **RF** transceiver, providing organizations with
real-time inventory and alert features. It also includes bi-directional...

DESCRIPTORS: AutoID; Equipment Management; Inventory; Labels; Location
     Awareness; Manufacturing; RFID; **Wireless** Networks

01089401   DOCUMENT TYPE: Product

PRODUCT NAME: SafeWord PremierAccess (089401)

Secure Computing Corp (586374)
4810 Harwood Rd
San Jose, CA 95124-5206 United States
TELEPHONE: (408) 979-6100

RECORD TYPE: Directory

CONTACT: Sales Department

REVISION DATE: 20020630

...PremierAccess (TM) provides users with control over Web, virtual private
network (VPN), and network application **access** . SafeWord PremierAccess
encompasses user self-enrollment, integrated authentication, public key
infrastructure (PKI), role-based authorization...

...features. It also includes single sign-on, session management, and
customization features. Users can integrate **access** control for Web, VPN,
Citrix, Windows, remote dialup, UNIX, SSH, Oracle, Novell, and other
applications...

...support for CheckPoint, Cisco, Alcatel, Nortel, Microsoft, and other
VPNs. The system also supports passwords, **tokens** , digital certificates,
smart cards and **wireless** and biometrics devices. SafeWord PremierAccess
can broker to external directories and RADIUS remote **access** systems,
extending users' **access** control options.

00123173   DOCUMENT TYPE: Review

PRODUCT NAMES: Linux (833916)

TITLE: Nanosize OS slims Linux for Wearable Computers
AUTHOR: Johnson, R Colin
SOURCE: Electronic Engineering Times,   v1101 p67(2) Feb 21, 2000
ISSN: 0192-1541
HOMEPAGE: http://www.eet.com

RECORD TYPE: Review
REVIEW TYPE: Product Analysis
GRADE: Product Analysis, No Rating

REVISION DATE: 20020228

...on the slimmed-down Linux-like OS for release next year.' Nanux will use
the **Wireless** Application Protocol (**WAP**), and InfoCharms has already
demonstrated prototypes of designs using 'open standards' for lower-cost
inexpensive development. InfoCharms' first product, a wearable **Smart**
Badge for conference attendees, does not support Nanux. The device can
communicate with other **Smart   Badges** to share e-business cards or show
social compatibilities, such as shared hobby, among badge wearers. A secret
only the wearer can understand enables communication among the **Smart**
Badges . A spokesperson for InfoCharms says, 'We **allow** you to program
your own code for what your badge does when it perceives an...

...badge's memory is full or the wearer is ready to end participation, a
kiosk **permits** the user to send information in the badge's accumulated
e-business cards and related...

DESCRIPTORS: Electronics; Embedded Systems; Handhelds & Palmtops; IBM PC &
     Compatibles; Linux; Mobile Computing; Operating Systems; **WAP ;**
     Wireless Network

```
Set      Items     Description
S1      910399     BADGE? OR RFID? ? OR BUTTON? OR FOB OR FOBS OR TOKEN? OR I-
                   DCARD? OR (ID  OR IDENTIFICATION)()(CARD? OR PIN OR PINS) OR -
                   IDS
S2       16851     S1(3N)(SMART? OR INTELLIGENT? OR CHIP? OR IC OR INTEGRATED-
                   ()CIRCUIT? OR TRANSPONDER?)
S3      2528518    WIRELESS? OR RF  OR RADIOFREQ? OR IR OR INFRARED? OR WIFI -
                   OR WAP OR BLUETOOTH? OR CELLULAR?
S4     14095331    ACCESS? OR CLEARANCE? OR PERMISSION? OR PERMIT? OR ALLOW?
S5      641744     (MULTIPL? OR SEVERAL OR VARIOUS OR VARIETY OR MANY OR PLUR-
                   AL?)(3N)(LEVEL? OR TIER? OR TYPE?) OR MULTILEVEL? OR MULTILAY-
                   ER?
S6      1010285    S4(3N)(LAN? ? OR NETWORK? OR INTRANET? OR BUILDING? OR COM-
                   POUND? OR CAMPUS? ? OR DATABASE? OR DATABANK? OR DATA()(BASE?
                   OR BANK?) OR INTRANET?)
S7        1055     S2(S)S4(S)S6
S8          20     S5(S)S7
S9          52     S3(S)S7
S10          0     S2(10N)S3(10N)S4(10N)(PERSONNEL? OR INDIVIDUAL? OR SECURIT?
                   RO EMPLOYEE?)
S11         72     S8 OR S9 OR S10
S12         45     RD (unique items)
S13         23     S12 NOT PY>2001
S14         18     S13 NOT PD>20010417
File 275:Gale Group Computer DB(TM)  1983-2003/Nov 19
         (c) 2003 The Gale Group
File  47:Gale Group Magazine DB(TM)  1959-2003/Nov 19
         (c) 2003 The Gale group
File  75:TGG Management Contents(R)  86-2003/Nov W2
         (c) 2003 The Gale Group
File 636:Gale Group Newsletter DB(TM)  1987-2003/Nov 19
         (c) 2003 The Gale Group
File  16:Gale Group PROMT(R)  1990-2003/Nov 19
         (c) 2003 The Gale Group
File 624:McGraw-Hill Publications 1985-2003/Nov 19
         (c) 2003 McGraw-Hill Co. Inc
File 484:Periodical Abs Plustext 1986-2003/Nov W3
         (c) 2003 ProQuest
File 613:PR Newswire 1999-2003/Nov 20
         (c) 2003 PR Newswire Association Inc
File 813:PR Newswire 1987-1999/Apr 30
         (c) 1999 PR Newswire Association Inc
File 141:Readers Guide 1983-2003/Oct
         (c) 2003 The HW Wilson Co
File 696:DIALOG Telecom. Newsletters 1995-2003/Nov 19
         (c) 2003 The Dialog Corp.
File 553:Wilson Bus. Abs. FullText 1982-2003/Oct
         (c) 2003 The HW Wilson Co
File 621:Gale Group New Prod.Annou.(R) 1985-2003/Nov 20
         (c) 2003 The Gale Group
File 674:Computer News Fulltext 1989-2003/Nov W2
         (c) 2003 IDG Communications
File  88:Gale Group Business A.R.T.S. 1976-2003/Nov 18
         (c) 2003 The Gale Group
File 369:New Scientist 1994-2003/Nov W2
         (c) 2003 Reed Business Information Ltd.
File 160:Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
File 635:Business Dateline(R) 1985-2003/Nov 20
         (c) 2003 ProQuest Info&Learning
File  15:ABI/Inform(R) 1971-2003/Nov 20
         (c) 2003 ProQuest Info&Learning
File   9:Business & Industry(R) Jul/1994-2003/Nov 19
         (c) 2003 Resp. DB Svcs.
File  13:BAMP 2003/Nov W2
         (c) 2003 Resp. DB Svcs.
File 810:Business Wire 1986-1999/Feb 28
         (c) 1999 Business Wire
```

DIALOG(R)File 636:Gale Group Newsletter DB(TM)
(c) 2003 The Gale Group. All rts. reserv.

04949932   Supplier Number: 72692202   (USE FORMAT 7 FOR FULLTEXT)
Philips Semiconductors unlocks the key to embedded secure technology.
M2 Presswire, pNA
April 3, 2001
Language: English   Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 570

...   secure applications in advanced embedded solutions such as
integrated circuits (ICs) for broadband wired and   **wireless** networks,
virtual private networks, smart cards, radio frequency identification (
RFID), and **smart** card readers. The resulting silicon solutions will
improve security transactions in applications such as secure **network
access** , m/e/

06922887   Supplier Number: 58526877   (USE FORMAT 7 FOR FULLTEXT)
**Hands-Free Network Security Management with VicinID Enterprise 2.0 from
  First Access.**
Business Wire, p0310
Jan 11, 2000
Language: English   Record Type: Fulltext
Document Type: Newswire; Trade
Word Count: 1150

...   to solve password problems, Information Systems decision-makers are
evaluating new user credential solutions... First **Access** offers a secure
 wireless credential that can reduce the help-desk burden, is convenient
for users, and delivers continuous...

...and virtual private networks (VPNs) provide both trusted employees and
e-business partners with ready **access** to the internal **network** .
      About First **Access** , Ltd.
      First Access is the award-winning provider of Practical Security
solutions and founder of...

DIALOG(R)File 674:Computer News Fulltext

083401
Novell ships multiple-level security authentication
Byline: Deni Connor
Journal: Network World
Publication Date: April 17, 2000
Word Count: 234   Line Count: 23

Text:
... is expected to ship its Modular Authentication Service this week. NMAS lets network managers establish **multiple levels** of security into the network, through a combination of password authentication, digital certificates, **tokens** , **smart** cards or biometric devices. Currently, Novell's login process has two phases. Users enter passwords...

...algorithm. The user is then authenticated to a Novell Directory Services server before being granted **access** . NMAS expands the authentication from a "something you know" (password) scheme to a combination of...

... you know" (password), "something you are" (retinal scan or fingerprint identification), or "something you have" (**token** or **smart** card). For instance, with NMAS, users might have to enter only a password to **access** their daily work on the **network** . To **access** more sensitive data, they might need to use a smart card or even a biometric device after entering their password. In addition with NMAS, the **network** manager can control **access** to the file and directory level.   Novell is one of the first vendors to **allow** **multiple** **levels** of authentication. Microsoft presently provides all the mechanisms Novell does, such as biometrics, but limits...

```
Set      Items    Description
S1      382774    BADGE? OR RFID? ? OR BUTTON? OR PIN OR PINS OR FOB OR FOBS
                  OR TOKEN? OR ID OR IDCARD? OR IDENTIFICATION()CARD? OR IDS
S2       12302    S1(3N)(SMART? OR INTELLIGENT? OR CHIP? OR IC OR INTEGRATED-
                  ()CIRCUIT? OR TRANSPONDER?)
S3      320092    WIRELESS? OR RF  OR RADIOFREQ? OR IR OR INFRARED? OR WIFI -
                  OR WAP OR BLUETOOTH? OR CELLULAR?
S4      986342    ACCESS? OR CLEARANCE? OR PERMISSION? OR PERMIT? OR ALLOW?
S5      242303    (MULTIPL? OR SEVERAL OR VARIOUS OR VARIETY OR MANY OR PLUR-
                  AL?)(3N)(LEVEL? OR TIER? OR TYPE?) OR MULTILEVEL? OR MULTILAY-
                  ER?
S6     1100637    NETWORK? OR SYSTEM? OR LAN? OR DATABASE? OR DATA()(BASE? OR
                  BANK?) OR DATABANK? OR WEBSITE? OR WEBPAGE? OR WEB()(SITE? OR
                  PAGE?) OR INTRANET?
S7      162146    BEACON? OR TRANSMITTER? OR TRANSPONDER? OR ANTENNA? OR REC-
                  EIVER?
S8          73    S2(S)S3(S)S4(S)S5
S9         369    S2(S)S3(S)S7
S10         16    S9(S)S5
S11        159    S9(S)S6
S12        297    S2(S)S3(S)S4
S13         40    S2(S)S4(2N)S5
S14        508    S2(5N)S4
S15       2742    S5(10N)S7
S16          2    S14(S)S15
S17        171    S2(5N)S3(5N)S7
S18          1    S2(10N)S3(10N)S4(10N)S5
S19        223    S10 OR S13 OR S16 OR S17 OR S18
S20         53    S19 AND IC=(G06F? OR H04L?)
S21         36    S20 NOT AD>20010417
S22         36    IDPAT (sorted in duplicate/non-duplicate order)
S23         35    IDPAT (primary/non-duplicate records only)
File 348:EUROPEAN PATENTS 1978-2003/Nov W02
         (c) 2003 European Patent Office
File 349:PCT FULLTEXT 1979-2002/UB=20031113,UT=20031106
         (c) 2003 WIPO/Univentio
```

DIALOG(R)File 348:EUROPEAN PATENTS

00879147
Transponder
Transponder
Repondeur
PATENT ASSIGNEE:
    TEXAS INSTRUMENTS DEUTSCHLAND GMBH, (454490), Haggertystrasse 1, 85356
        Freising, (DE), (Applicant designated States: all)
INVENTOR:
    Meier, Herbert, Am Muhlbachbogen 11, 85368 Moosburg, (DE)
LEGAL REPRESENTATIVE:
    Degwert, Hartmut, Dipl.-Phys. et al (38536), Prinz & Partner GbR,
        Manzingerweg 7, 81241 Munchen, (DE)
PATENT (CC, No, Kind, Date):   EP 805575 A2 971105 (Basic)
                               EP 805575 A3 020306
APPLICATION (CC, No, Date):   EP 97107293 970502;
PRIORITY (CC, No, Date): US 16862 960503
DESIGNATED STATES: DE; FR; GB; IT; NL
INTERNATIONAL PATENT CLASS: **H04L-009/32** ; **H04L-009/18** ; G06K-019/07

ABSTRACT EP 805575 A2
    Novel means of achieving increased security while still obtaining a low
cost, manufacturable device are disclosed and claimed. The first mode of
operation is the learn mode which provides means for initial checkout
with no security. In the learn mode of operation, the interrogator and
transponder may be switched to a predetermined error detection algorithm,
i.e. CCITT(Start Mask 46, CCITT Mask 42), and certain information is
programmed into the transponder memory. During programming, all the bits
received from the interrogator are shifted through the preintialized CRC
generator. In addition, once the transponder response is sent back to the
interrogator, the response is also shifted through a preinitialized CRC
generator within the interrogator(which could be a software
implementation). Because neither the Cypher Key 58 nor the Function Key
56 are directly readable once programmed, an encryption must be performed
to verify the proper Cypher Key 58 and Function Key 56 were programmed
into the transponder's memory. In the second and encryption mode of
operation, after a special Command/Address is transmitted, a Random
Number (which may vary in length but which has a minimum length) is
transmitted from the interrogator to the transponder which in turn
generates the Signature by shifting the Random Number through the CRC
Encryption Generator (initialized with the Cypher 58 and Function Key
56). The Signature along with data, status and address are transmitted
back to the interrogator which in the meantime has predetermined the
awaited Signature using the same Cypher 58 and Function Key 56.
    If the received Signature and calculated Signature are equal,
validation is positive and then the programmed data must be
locked(especially the Cypher Key 58 and Function Key 56) to protect them
against reprogramming in the future
ABSTRACT WORD COUNT: 285
NOTE:
    Figure number on first page: 3

LEGAL STATUS (Type, Pub Date, Kind, Text):
  Change: 020306 A2 International Patent Classification changed:
                             20020117
  Application: 971105 A2 Published application (A1with Search Report
                             ;A2without Search Report)
  Change: 030319 A2 Legal representative(s) changed 20030128
  Examination: 021023 A2 Date of request for examination: 20020820
  Search Report: 020306 A3 Separate publication of the search report
  Examination: 021127 A2 Date of dispatch of the first examination
                             report: 20021014
  *Assignee: 980610 A2 Applicant (transfer of rights) (change): TEXAS
                             INSTRUMENTS DEUTSCHLAND GMBH (454490)
                             Haggertystrasse 1 85356 Freising (DE)

INTERNATIONAL PATENT CLASS: **H04L-009/32** ...

... **H04L-009/18**

...CLAIMS said Function Key is programmed into a memory post manufacturing
        by a customer.
   10. An **RF - ID** system comprising:
    a **transponder** having a generator for receiving an interrogation signal
        and transmitting response data;
    an interrogator having...

DIALOG(R)File 349:PCT FULLTEXT
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00811705   **Image available**
A METHOD AND SYSTEM FOR ESTABLISHING A SHORT-RANGE RADIO LINK
PROCEDE ET SYSTEME PERMETTANT D'ETABLIR UNE LIAISON RADIO COURTE DISTANCE
Patent Applicant/Assignee:
  TELEFONAKTIEBOLAGET LM ERICSSON (publ), S-126 25 Stockholm, SE, SE
    (Residence), SE (Nationality)
Inventor(s):
  PHILIPSSON Lars, Bredgatan 7B, S-222 21 Lund, SE,
Legal Representative:
  STROM Tore (et al) (agent), Strom & Gulliksson AB, Box 4188, S-203 13
    Malmo, SE,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200145319 A1 20010621 (WO 0145319)
  Application: WO 2000SE2538 20001215 (PCT/WO SE0002538)
  Priority Application: SE 994683 19991217
Designated States: AE AG AL AM AT AT (utility model) AU AZ BA BB BG BR BY
  BZ CA CH CN CR CU CZ CZ (utility model) DE DE (utility model) DK DK
  (utility model) DM DZ EE EE (utility model) ES FI FI (utility model) GB
  GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA
  MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SK (utility model)
  SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
  ((OAPI utility model)) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: **H04L-009/08**
International Patent Class: H04Q-007/32
Publication Language: English
Filing Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 3927

English Abstract
  A method and system for establishing a first short-range radio link,
  operating within a first link range (13), between a stationary unit (12)
  and a mobile communication device (10, A) in a wireless network
  environment, wherein the stationary unit (12) transmits an interrogation
  signal to said mobile communication device (10, A) via a short-range
  communication link operating within a second link range (14) essentially
  smaller than said first link range (13). The mobile communication device
  (10, A) receives the interrogation signal from the stationary unit (12),
  and generates and transmitting a respond signal, including a unique
  identification number of the mobile communication device (10, A), to said
  interrogation signal. The stationary unit (12) receives said respond
  signal, and authenticate the identification number. Finally, the
  stationary unit (12) and said mobile communication device (10, A)
  establish a connection via said first short-range radio link.

French Abstract
  L'invention concerne un procede et un systeme permettant d'etablir une
  premiere liaison radio courte distance, fonctionnant dans les limites
  d'une premiere portee (13), entre une unite fixe (12) et un dispositif
  (10, A) de communication mobile dans un environnement du type reseau
  hertzien. Selon ledit procede, l'unite fixe (12) envoie un signal
  d'interrogation audit dispositif (10, A) de communication mobile via une
  liaison de communication courte distance fonctionnant dans les limites
  d'une seconde portee (14), sensiblement plus petite que la premiere
  portee (13). Le dispositif (10, A) de communication mobile recoit le
  signal d'interrogation emis par l'unite fixe (12), et en reponse audit
  signal d'interrogation, il genere et transmet un signal de reponse
  comprenant le numero d'identification unique du dispositif (10, A) de
  communication mobile. L'unite fixe (12) recoit le signal de reponse et

authentifie le numero d'identification. Enfin, l'unite fixe (12) et le
dispositif (10, A) de communication mobile etablissent une connexion via
la premiere liaison radio courte distance.

Legal Status (Type, Date, Text)
Publication   20010621 A1 With international search report.
Examination   20010920 Request for preliminary examination prior to end of
                         19th month from priority date

Main International Patent Class: **H04L-009/08**
Fulltext Availability:
  Detailed Description

Detailed Description
...   object of the invention is to provide a
  mobile communication device for use in a **wireless**
  communication network, comprising a an ID **transponder** for
  receiving an interrogation signal from a stationary unit
  and generating a respond signal to...

...is a block diagram of a mobile communication
  device according to the invention including an **ID
   transponder** ,
  FIG 3 is a schematic diagram of a first embodiment of
  the **ID   transponder** in FIG 21
  FIG 4A is a block diagram of a first embodiment of a...

...of a wireless
  communication system according to the invention. For the
  purpose of illustration the **wireless** communication system
  according to the invention is described in connection with
  a particular **wireless** communication application, wherein a
  first short-range radio link is to be established between a
    wireless electronic pay terminal 10 and a stationary point
  of sale terminal 12 for communication of transaction data
  during a payment procedure. In this embodiment of the
  invention a **Bluetooth** link with a range 13 of about 10m is
  used for the first short-range radio link.

  An environment, such as in a supermarket, including
  several customers provided with **wireless** electronic pay
  terminals 10 queuing at a plurality of point of sale
  terminals 12 for...

...the first link range 13.
  The pay terminal 10 further comprises a passive radio
  frequency **ID   transponder** 22 for communication with said
  point of sale terminal 12 via a short-range radio...

23/5,K/26   (Item 26 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2003 WIPO/Univentio. All rts. reserv.

00801792   **Image available**
BANDWIDTH EFFICIENT PULSE PROCESSOR FOR RFID DATA COMMUNICATION
**PROCESSEUR D'IMPULSION EFFICACE DE LARGEUR DE BANDE POUR LA COMMUNICATION
    DE DONNEES D'IDENTIFICATION DE FREQUENCES RADIO**
Patent Applicant/Assignee:
  CHECKPOINT SYSTEMS INC, 101 Wolf Drive, P.O. Box 188, Thorofare, NJ 08086
  , US, US (Residence), US (Nationality)
Inventor(s):
  SALESKI Ronald, 46 New Road, Tabernacle, NJ 08088, US,
  FREED Michael K, 1315 North Clayton Street, Wilmington, DE 19806, US,
  GALLAGHER William F III, 16 South Forge Manor Drive, Phoenixville, PA
    19460, US,
  INUI Shinichiro, 44 Treaty Elms Lane, Haddonfield, NJ 08033, US,
Legal Representative:
  JABLON Clark A (et al) (agent), Akin, Gump, Strauss, Hauer & Feld,
    L.L.P., One Commerce Square, Suite 2200, 2005 Market Street,
    Philadelphia, PA 19103-7086, US,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 200135318 A2-A3 20010517 (WO 0135318)
  Application: WO 2000US41727 20001101 (PCT/WO US0041727)
  Priority Application: US 99164180 19991109
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ
  DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ
  LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG
  SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
  (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
  (OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
  (AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
  (EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: **H04L-027/00**
Publication Language: English
Filing Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 2626

English Abstract
  An interrogator is provided for reducing the bandwidth required for
  transmitting a command or control signals to a radio frequency
  identification transponder. The interrogator includes a carrier signal
  generator (RF OSC.), a modulator (10) which modulates the carrier signal
  with a shaped pulse envelope, and a transmitter (28) which transmits the
  modulated carrier signal to the transponder. The modulated carrier signal
  results in a reduced transmission signal bandwidth. The shaped pulse
  envelope may be a sinusoidal envelope, wherein the modulated carrier
  signal is a raised cosine modulated signal.

French Abstract
  L'invention concerne un interrogateur permettant de reduire la largeur de
  bande necessaire a la transmission de signaux de commande ou de controle
  a un repondeur d'identification de frequences radio. L'interrogateur
  comprend un generateur de signaux porteurs, un modulateur qui module le
  signal porteur dote d'une enveloppe d'impulsions formees, et un emetteur
  qui transmet le signal porteur module au repondeur. Le signal porteur
  module se solde par une diminution de la largeur de bande des signaux de
  transmission. L'enveloppe de l'impulsion formee peut etre une enveloppe
  sinusoidale, ou le signal porteur module constitue un signal module de
  cosinus carre.

Legal Status (Type, Date, Text)
Publication 20010517 A2 Without international search report and to be
                        republished upon receipt of that report.
Examination   20010816 Request for preliminary examination prior to end of

Detailed Description
... harmonic content of transmissions by imposing a sinusoidal amplitude
  modulation response on an radio frequency (**RF**) carrier that is used to
  remotely power and signal an **RFID   transponder** .

  Low cost **RFID** tags are powered by electric or magnetic fields from an
  interrogator or "reader". As can...

DIALOG(R)File 349:PCT FULLTEXT
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00509352   **Image available**
RADIO FREQUENCY IDENTIFICATION   INTERROGATOR SIGNAL PROCESSING SYSTEM FOR
    READING MOVING TRANSPONDERS
SYSTEME DE TRAITEMENT DE SIGNAUX D'IDENTIFICATEUR DE HAUTE FREQUENCE POUR
    LA LECTURE DE TRANSPONDEURS MOBILES
Patent Applicant/Assignee:
  INTERMEC IP CORP,
Inventor(s):
  ZAI Li-Cheng R,
  CHIEU Trieu C,
  MARTINEZ Rene D,
Patent and Priority Information (Country, Number, Date):
  Patent: WO 9940704 A1 19990812
  Application: WO 99US2611 19990206 (PCT/WO US9902611)
  Priority Application: US 9873933 19980206; US 98153617 19980915
Designated States: CA AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE
Main International Patent Class: **H04L-027/10**
International Patent Class: **H04L-027/14** ; H03D-003/22; H03D-003/00;
  G01S-013/00; G01S-013/08; H04B-005/00; H04B-001/00; H04B-001/68
Publication Language: English
Fulltext Availability:
  Detailed Description
  Claims
Fulltext Word Count: 7485

English Abstract
  An RF/ID interrogator (10) recovers a backscattered data signal from a
  moving **RF / ID transponder** (15) by combining the received in-phase
  (I) and quadrature-phase (Q) components of the signal in a manner. The
  RF/ID interrogator (10) comprises a radio (40) having a transmitter
  portion (40a) to provide an RF carrier signal and a receiver portion
  (40b) to receive the I and Q signals from the RF transponder (15). A
  processor (30) coupled to the radio and the filter executes stored
  instructions to combine the filtered (I) and (Q) signals and recovering
  the original backscattered data signal therefrom, and estimating a phase
  angle beta(t) between the I and Q signals and the RF carrier by
  calculating an arctengent of a ratio of the filtered O and I signals and
  recovering the backscattered data signal by summing a product of filtered
  I signal and the cosine of the estimated phase angle beta(t) with a
  product of the filtered Q signal and the sine of the estimated phase
  angle beta(t).

French Abstract
   La presente invention concerne un identificateur HF (10) qui recupere un
  signal de donnees retrodiffuse provenant d'un transpondeur RF/ID mobile
  (15) en combinant les composantes du signal recues en phase (I) et en
  quadrature de phase (Q). L'identificateur RF (10) comprend un dispositif
  de radiocommunication (40) comportant une partie emetteur (40a) emettant
  un signal porteur HF et une partie recepteur (40b) recevant les signaux I
  et Q du transpondeur HF (15). Un processeur (30) couple au dispositif de
  radiocommunication et au filtre execute des instructions stockees afin de
  combiner les signaux I et Q filtres et recuperer ainsi le signal de
  donnees retrodiffuse d'origine, evaluant un angle de phase beta(t) entre
  les signaux I et Q et le signal porteur HF en calculant une arc-tengante
  d'un rapport entre les signaux 1 et Q filtres et recuperer le signal de
  donnees retrodiffuse en additionnant le produit du signal I filtre et du
  cosinus de l'angle de phase beta(t) evalue et le produit du signal Q
  filtre et du sinus de l'angle de phase beta(t) evalue.

Main International Patent Class: **H04L-027/10**
International Patent Class: **H04L-027/14** ...
Fulltext Availability:
  Detailed Description

English Abstract
An RF/ID interrogator (10) recovers a backscattered data signal from a
moving **RF / ID transponder** (15) by combining the received in-phase
(I) and quadrature-phase (Q) components of the...

Detailed Description
... OF THE INVENTION
I . Field of the Invention
The invention relates to radio frequency identification (**RF** /ID)
interrogators and transponders, and more particularly, to an RF1ID
interrogator that can recover data...

...varying amounts of an electromagnetic field provided by an RF/ID
interrogator by modifying their **antenna** matching impedances. The RF/ **ID
transponders** can therefore operate independent of the frequency of the
energizing field, and as a result...

...radio frequency (RF) interference, such as utilizing frequency hopping
spread spectrum modulation techniques. The RF/ **ID transponders** may
either be passive, in which they extract their power from the
electromagnetic field provided by the interrogator, or active, in which
they include their own power source.

Since RF/ **ID transponders** do not include a radio transceiver, they can
be
manufactured in very small, light weight and inexpensive units. Passive
RF/ **ID transponders** are particularly cost effective since they lack a
power source. In view of these advantages, **RF** /1D **transponders** can be
used in **many types** of applications in which it is desirable to track
information regarding a moving or inaccessible object. One such
application is to affix **RF / ID transponders** to work pieces moving
along a conveyor belt of an assembly line. The RF1ID **transponders** would
contain stored information regarding the particular assembly requirements
for the work piece to enable...

...line without having to modify the assembly line for each unique
requirement. Another application for **RF** /ID systems is to collect
information from a moving motor vehicle, such as for vehicle...a typical
data packet at a rate of 40 kilobits per second (kpbs)). Thus, an **RF /
ID transponder** moving at a rate of about 1,500 cm/sec, or 34 miles per
hour...

...to provide an RF/ID interrogator having a capability of recovering data
from a moving **RF / ID transponder** .

2
SUMMARY OF THE INVENTION
In accordance with the teachings of the present invention, an...
...manner that cancels out the amplitude nulls and phase reversals caused
by movement of the **RF / ID transponder** .

More particularly, the **RF** /ID interrogator comprises a radio having a
transmitter portion to provide an **RF** carrier signal and a receiver
portion to receive the I and Q signals from the...described briefly.

BRIEF DESCRIPTION OF THE DRAWINGS
Fig. I is a block diagram illustrating an **RF / ID** interrogator and
transponder ;
Fig. 2 is an embodiment of the **RF** /ID interrogator of Fig. 1;
Fig. 3A-31D are graphs illustrating the transponder signal at...

...need for an RF/ID interrogator having a capability of recovering data
from a moving **RF / ID transponder** . In the detailed description that
follows, like element numerals are used to describe like elements...

```
Set       Items    Description
S1        712092   BADGE? OR BUTTON? OR PIN OR PINS OR FOB OR FOBS OR TOKEN? -
                   OR CARD? ? OR ID OR IDS
S2         40264   S1(3N)(SMART? OR INTELLIGENT? OR CHIP? OR IC OR INTEGRATED-
                   ()CIRCUIT? OR TRANSPONDER?)
S3        285992   WIRELESS? OR RF  OR RADIOFREQ? OR IR OR INFRARED? OR WIFI -
                   OR WAP OR BLUETOOTH? OR CELLULAR?
S4       1838031   ACCESS? OR CLEARANCE? OR PERMISSION? OR PERMIT? OR ALLOW?
S5        167002   (MULTIPL? OR SEVERAL OR VARIOUS OR VARIETY OR MANY OR PLUR-
                   AL?)(3N)(LEVEL? OR TIER? OR TYPE?) OR MULTILEVEL? OR MULTILAY-
                   ER?
S6       3425043   NETWORK? OR SYSTEM? OR LAN? OR DATABASE? OR DATA()(BASE? OR
                   BANK?) OR DATABANK? OR WEBSITE? OR WEBPAGE? OR WEB()(SITE? OR
                   PAGE?) OR INTRANET?
S7        547163   BEACON? OR TRANSMITTER? OR TRANSPONDER? OR ANTENNA? OR REC-
                   EIVER?
S8             4   S2 AND S3 AND S4 AND S5
S9           434   S2 AND S3 AND S7
S10            5   S9 AND S5
S11          243   S9 AND S6
S12          131   S11 AND (CONTROL? OR MONITOR? OR MANAGE? OR ADMINIST?)
S13           29   S12 AND IC=G06F?
S14          243   S1 AND S11
S15          131   S14 AND S12
S16           16   S15 AND (BUILDING? OR FLOOR? ? OR DOORWAY? OR ENTRANCE? OR
                   ENTRY OR COMPOUND? OR CAMPUS?)
S17           53   S8 OR S10 OR S13 OR S16
S18           31   S17 AND IC=(G06F? OR H04L?)
S19           31   IDPAT (sorted in duplicate/non-duplicate order)
S20           31   IDPAT (primary/non-duplicate records only)
File 347:JAPIO Oct 1976-2003/Jul(Updated 031105)
         (c) 2003 JPO & JAPIO
File 350:Derwent WPIX 1963-2003/UD,UM &UP=200374
         (c) 2003  Thomson Derwent
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DIALOG(R)File 350:Derwent WPIX
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015065981   **Image available**
WPI Acc No: 2003-126497/200312
  Method for operating computer security device in network
Patent Assignee: YOON D M (YOON-I)
Inventor: YOON D M
Number of Countries: 001 Number of Patents: 001
Patent Family:
Patent No   Kind   Date   Applicat No   Kind   Date   Week
KR 2002065284 A   20020813 KR 20015721   A   20010206 200312 B

Priority Applications (No Type Date): KR 20015721 A 20010206
Patent Details:
Patent No Kind Lan Pg   Main IPC   Filing Notes
KR 2002065284 A   1 G06F-015/00

Abstract (Basic): KR 2002065284 A
      NOVELTY - A method for operating a computer security device in a
   network is provided to **control** a series of actions for logging onto
   a **network**   **system** by preparing an **RF** (Radio Frequency) receiving
   unit in a slot of a computer and using an **IC**   **card** .
      DETAILED DESCRIPTION - A **network**   **system** comprises an ID card
   reading unit and a server. The ID card reading unit reads the user
   information stored in a non-contact **IC**   **card** . The server forms a
   client **network** with computers having storage units and stores the
   natural IC information of respective client computers. In the storage
   unit of the computer, user information is embedded. If the **IC**   **card**
   passes by a magnetic field formed in a specific area via an **RF**
   antenna , the user information stored in the **IC**   **card** is read to
   authenticate a user. With the first user authentication, a
   corresponding computer is operated normally. With the second user
   authentication, the computer **system** is changed into the **network**
   log-on state.
      pp; 1 DwgNo 1/10
Title Terms: METHOD; OPERATE; COMPUTER; SECURE; DEVICE; **NETWORK**
Derwent Class: T01; T04
International Patent Class (Main): **G06F-015/00**
File Segment: EPI

DIALOG(R)File 350:Derwent WPIX
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014639621   **Image available**
WPI Acc No: 2002-460325/200249
XRPX Acc No: N02-363414
Attendance and absence management   system **in school, converts** ID
information from each IC   card **and is transmitted to remote** receiver
through infrared   transmitter
Patent Assignee: DAINIPPON PRINTING CO LTD (NIPQ)
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 2002140668	A	20020517	JP 2000334065	A	20001101	200249	B

Priority Applications (No Type Date): JP 2000334065 A 20001101
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2002140668	A		6	G06K-019/00	

Abstract (Basic): JP 2002140668 A
     NOVELTY - The reader reads the **ID** information from an **IC card**
(2) attached to clothes of each student. A converter converts the read
information and is transmitted to a remote **receiver** (18) through **IR
transmitter** . Based on the received information, the presence/absence
information is stored.
     USE - For **management** of students attendance and absence in
schools, university.
     ADVANTAGE - Enables reliable collection of presence/absence
information of each student, hence illegal practice among students is
prevented. Transmission efficiency is enhanced by using **infrared**
rays.
     DESCRIPTION OF DRAWING(S) - The figure shows a model classroom
using the **management   system** .
     IC   card (2)
     Remote **receiver** (18)
     pp; 6 DwgNo 1/6
Title Terms: ATTEND; ABSENCE; **MANAGEMENT** ; **SYSTEM** ; SCHOOL; CONVERT; ID;
  INFORMATION; IC; CARD; TRANSMIT; REMOTE; RECEIVE; THROUGH; **INFRARED** ;
  TRANSMIT
Derwent Class: T01; T04
International Patent Class (Main): G06K-019/00
International Patent Class (Additional): **G06F-017/60** ; G06K-017/00;
  G06K-019/10
File Segment: EPI

014516487   **Image available**
WPI Acc No: 2002-337190/200237
   System **for individually managing loan articles with** rf **chip and**
   system **for integrally managing articles of profit sharing method**
Patent Assignee: KOREA INTERNET DISTRIBUTION SYSTEMS INC (KOIN-N)
Inventor: JANG G C
Number of Countries: 001 Number of Patents: 001
Patent Family:
Patent No   Kind   Date   Applicat No   Kind   Date   Week
KR 2001107069 A   20011207 KR 200028257   A   20000525 200237 B

Priority Applications (No Type Date): KR 200028257 A 20000525
Patent Details:
Patent No Kind Lan Pg   Main IPC   Filing Notes
KR 2001107069 A   1 G06F-017/60

Abstract (Basic): KR 2001107069 A
     NOVELTY - A **system** for individually managing loan articles with
   RF chip and a **system** for integrally managing articles of a profit
   sharing method are provided to promptly calculate fees by using a
   chargeable card, and enable both a **web**   **site** operator and a rental
   shop to make profits.
     DETAILED DESCRIPTION - A **receiver** (11) receives a separation
   information transferred from an article separation device(B). A **smart**
    card reader(12) reads a record information of a **smart**   **card** and
   updates the record information of the **smart**   **card** that is granted to
   a customer. A keypad(13) is used for inputting the customer's password.
   A printer(14) issues a receipt when a fee calculation is completed. An
   RF chip reader(15) reads a record information of an **RF** chip attached
   to a loan article. A displayer(16) displays a relational information,
   return state, etc. A **controller** (10) **controls** operation of each
   part. A memory(17) stores a **database** information and a customer
   information, and a **control** program for performing a **control**
   operation of the **controller** . The memory(17) has a ROM and a RAM
   therein.
     pp; 1 DwgNo 1/10
Title Terms: **SYSTEM** ; INDIVIDUAL; **MANAGE** ; LOAN; ARTICLE; **RF** ; CHIP;
   SYSTEM ; INTEGRAL; **MANAGE** ; ARTICLE; PROFIT; SHARE; METHOD
Derwent Class: T01
International Patent Class (Main): **G06F-017/60**
File Segment: EPI

DIALOG(R)File 350:Derwent WPIX

014351779   **Image available**
WPI Acc No: 2002-172480/200223
XRPX Acc No: N02-130982
  **Flight passenger and luggage checking-in method in airport, involves
  storing personal and traveling details of passenger along with his
  fingerprint data in memory chip installed in his luggage**
Patent Assignee: KUTSCHKE E J (KUTS-I); LUEDI H E (LUED-I); STAUB P
  (STAU-I)
Inventor: KUTSCHKE E J; LUEDI H E; STAUB P
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
DE 10007127	A1	20010823	DE 1007127	A	20000217	200223	B

Priority Applications (No Type Date): DE 1007127 A 20000217
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 10007127	A1		9	G06F-017/60	

Abstract (Basic): DE 10007127 A1
      NOVELTY - A terminal connected to airport processor acquires
  passenger traveling details from his flight ticket and personal details
  like name, address, etc. Luggage weight data, personal and traveling
  details are stored along with passenger's fingerprint data in memory
  chip installed in the luggage. A boarding card with passenger and
  luggage specific data is issued by the terminal.
      USE - For finding owner of specific luggage or luggage of
  particular passenger in airport.
      ADVANTAGE - Enables finding real owner of luggage or detection of
  theft etc., as fingerprint of passenger is stored in memory chip
  installed in his luggage. Eases detection of lost luggage and
  simplifies loading of luggage in correct plane. As the memory chip has
  antenna , the stored data can be read through **wireless** communication
  and collected in **database** of central airport processor. Improves
  security by avoiding unauthorized loading of luggage. Use of boarding
  card along with memory **chip** installed in luggage facilitates
  locating passenger as well as his luggage.
      DESCRIPTION OF DRAWING(S) - The figure shows the flowchart of
  passenger locating and luggage **management** method.
      pp; 9 DwgNo 1a/1
Title Terms: FLIGHT; PASSENGER; LUGGAGE; CHECK; METHOD; AIRPORT; STORAGE;
  PERSON; DETAIL; PASSENGER; FINGERPRINT; DATA; MEMORY; CHIP; INSTALLATION;
  LUGGAGE
Derwent Class: Q25; Q35; S05; T04; T05
International Patent Class (Main): **G06F-017/60**
International Patent Class (Additional): B64F-001/32; B65G-047/50
File Segment: EPI; EngPI

DIALOG(R)File 350:Derwent WPIX
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014107581   **Image available**
WPI Acc No: 2001-591793/200167
XRPX Acc No: N01-440974
    Smart   card **memory** management   system **allowing card users access to
   a number of services offered by a town**
Patent Assignee: POUPEAU J M (POUP-I)
Inventor: POUPEAU J M
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
FR 2806813	A1	20010928	FR 20003482	A	20000317	200167	B

Priority Applications (No Type Date): FR 20003482 A 20000317
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
FR 2806813	A1		14	G06F-012/06	

Abstract (Basic): FR 2806813 A1
     NOVELTY - The card memory includes an allocation table (**RF**),
   containing the addresses of different applications, which forms a the
   top of a repertoire (GD) and file (GF) tree. The allocation table is
   described as a function of repertoire numbers contained in the latter.
   Each repertoire is described as a function of file numbers contained in
   the latter. Each file is described as a function of the data length
   contained in the latter, on one or several memory blocks chained
   together.
     DETAILED DESCRIPTION - The **system** is of the type which has a
   number of card (1) terminals. Each card has a memory (10) containing a
   matrix of n sectors (12) with p memory blocks (13) and a block access
   controller (11). The card memory is **managed** by the terminals (2)
   microprocessor (21) via the block access **controller** . Preferably the
   data raster defining the allocation table essentially includes the
   implantation addresses of the applications, the type of application
   support, a file or repertoire, and its identifier.
     USE - For access to various town information services.
     ADVANTAGE - Designed to allow a user to access a number of services
   using a single card.
     DESCRIPTION OF DRAWING(S) - The drawings illustrates a non contact
   smart   card , terminal and memory
       smart   card (1)
     card reader (2)
     memory (10)
       transmitter / receiver circuit (11)
     sectors (12)
     memory blocks (13)
     data **transmitter / receiver** circuit (20)
     microprocessor, memory and internal clock (21,22,23)
     pp; 14 DwgNo 1, 2a/2
Title Terms: SMART; CARD; MEMORY; **MANAGEMENT** ; **SYSTEM** ; ALLOW; CARD; USER
   ; ACCESS; NUMBER; SERVICE; OFFER; TOWN
Derwent Class: T01; T04
International Patent Class (Main): **G06F-012/06**
International Patent Class (Additional): G06K-019/07
File Segment: EPI

DIALOG(R)File 350:Derwent WPIX
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013877275   **Image available**
WPI Acc No: 2001-361487/200138
Related WPI Acc No: 2001-350138; 2001-350139; 2001-350140
XRPX Acc No: N01-263191
   Loan goods control   system **in library, includes host PC which** manages
   publication based on information read from wireless   IC   card
Patent Assignee: KOKUSAI DENKI KK (KOKZ); HITACHI KOKUSAI DENKI KK (KOKZ
)
Inventor: AKAIKE K; ARIDOME H; IGARASHI K; MIURA Y; OGAWA T; OTANI Y
Number of Countries: 002 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 2001101285	A	20010413	JP 99276786	A	19990929	200138	B
US 6595418	B1	20030722	US 2000663849	A	20000918	200354	

Priority Applications (No Type Date): JP 99276786 A 19990929; JP 99273807 A
   19990928; JP 99273808 A 19990928; JP 99273809 A 19990928
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2001101285	A		8	G06F-017/60	
US 6595418	B1			G06K-005/00	

Abstract (Basic): JP 2001101285 A
     NOVELTY - A **wireless   IC   card** outputs stored predetermined
   information about a publication, as **wireless** signal. A loop **antenna**
   (30) receives **wireless** signal from **wireless   IC   card** . A reader
   (40) reads information from **wireless   IC   card** based on the signal
   received from loop **antenna** . A host PC (100) **manages** a publication
   based on read information.
     USE - For managing lending-out situation of loan goods such as
   publication, CD in library.
     ADVANTAGE - In addition to stock taking **management** of goods, and
   lending-out **management** service, simple various **management** such as
   prevention of real time position detection of goods, and in accurate
   carrying out, are performed by attaching **wireless   IC   card** in
   goods such as publication for a loan, hence saves labor.
     DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of
   entire component of goods **control   system** . (Drawing includes
   non-English **language** text).
     Loop **antenna** (30)
     Reader (40)
     Host PC (100)
     pp; 8 DwgNo 10/15
Title Terms: LOAN; GOODS; **CONTROL** ; **SYSTEM** ; LIBRARY; HOST; **MANAGE** ;
   PUBLICATION; BASED; INFORMATION; READ; **WIRELESS** ; IC; CARD
Derwent Class: P25; Q35; T01; T04; V03; W05
International Patent Class (Main): **G06F-017/60** ; G06K-005/00
International Patent Class (Additional): B65G-001/137; **G06F-003/06** ;
   G06F-003/08 ; G06K-017/00; G06K-019/00; G06K-019/07; G08B-013/22
File Segment: EPI; EngPI

DIALOG(R)File 347:JAPIO
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06338713   **Image available**
ACCESS   CONTROL SYSTEM AND **ACCESS   CONTROL** METHOD

PUB. NO.:   11-280317 [JP 11280317 A]
PUBLISHED: October 12, 1999 (19991012)
INVENTOR(s):   HSU SHI-PING
                EVANS BRUCE W
                MESSENGER ARTHUR F
                ZSOLNAY DENES L
APPLICANT(s):   TRW INC
APPL. NO.:   10-352685 [JP 98352685]
FILED: December 11, 1998 (19981211)
PRIORITY: 995328 [US 995328], US (United States of America), December
                22, 1997 (19971222)
INTL CLASS: E05B-049/00; **G06F-015/00** ; **G06F-019/00** ; G07D-009/00;
                G07F-019/00

ABSTRACT

PROBLEM TO BE SOLVED: To obtain safety and convenience to an access system
to a building or a machine such as an automatic teller machine(ATM).
SOLUTION: When a user 10 holds or bears an identification **badge** 18
containing a **transponder** and approaches an **access - controlled** door 12,
a temporary identification data is transmitted to an **access   controller**
 14. The **access   controller** 14 accesses a fingerprint data base by using
a temporary identification data such as a customer number or an employee
number, and calls a reference fingerprint data beforehand stored in the
fingerprint data base. The called reference fingerprint data is compared
with an object fingerprint image obtained from the user 10 through a
fingerprint sensor 16 for the door by a fingerprint collator, the temporary
identification data is confirmed, and the user is accessed to a permitted
door or machine.

DIALOG(R)File 350:Derwent WPIX
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012882776   **Image available**
WPI Acc No: 2000-054609/200005
XRPX Acc No: N00-042588
   Access   control **method for access-restricted system e.g. for mobile
   radio and pay TV-system - requiring service provider to scan
   identification information of user mobile telephone for judging whether
   access authorisation can be granted, or not**
Patent Assignee: SIEMENS AG (SIEI)
Inventor: BURCHARD B; PRANGE S
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
DE 19846452	A1	19991216	DE 1046452	A	19981008	200005	B

Priority Applications (No Type Date): DE 1046452 A 19981008
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 19846452	A1		6	H04L-009/32	

Abstract (Basic): DE 19846452 A
      The method of monitoring access to a access-restricted system, such
   as a television (TV) **receiver** , involves deriving identification
   information from the user information which is stored on a
   user-specified **smart - card** (11) for a mobile telephone (3).
      The identification information of the mobile telephone is scanned
   and from the obtained identification information it is judged whether
   access authorisation for use of the system by the respective use is
   allowed or not. An independent claim is given for the access-restricted
   system.
      USE - For data or information service, such as pay-phone or pay-
   TV.
      ADVANTAGE - Access is simplified especially to different service
   outputs or different servers.
      Dwg.1/2
Title Terms: ACCESS; CONTROL; METHOD; ACCESS; RESTRICT; SYSTEM; MOBILE;
   RADIO; PAY; TELEVISION; SYSTEM; REQUIRE; SERVICE; SCAN; IDENTIFY;
   INFORMATION; USER; MOBILE; TELEPHONE; JUDGEMENT; ACCESS; AUTHORISE; CAN
Derwent Class: Q17; T01; W01; W02; W03
International Patent Class (Main): H04L-009/32
International Patent Class (Additional): B60R-011/02; B60R-025/00;
   G06F-017/60 ; H04M-001/00; H04N-007/16
File Segment: EPI; EngPI

```
Set      Items    Description
S1          8     AU=(JAM M? OR JAM, M?)
S2          4     S1 AND IC=G06F?
S3          4     IDPAT (sorted in duplicate/non-duplicate order)
S4          3     IDPAT (primary/non-duplicate records only)
File 344:Chinese Patents Abs Aug 1985-2003/Apr
         (c) 2003 European Patent Office
File 347:JAPIO Oct 1976-2003/Jul(Updated 031105)
         (c) 2003 JPO & JAPIO
File 348:EUROPEAN PATENTS 1978-2003/Nov W02
         (c) 2003 European Patent Office
File 349:PCT FULLTEXT 1979-2002/UB=20031113,UT=20031106
         (c) 2003 WIPO/Univentio
File 350:Derwent WPIX 1963-2003/UD,UM &UP=200374
         (c) 2003  Thomson Derwent
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4/5/1   (Item 1 from file: 350)

015330659   **Image available**
WPI Acc No: 2003-391594/200337
XRPX Acc No: N03-312801
  **Context-aware computer management method in hospital, involves allowing
  smart badge wearers to access database information having clearance
  levels not higher than lowest clearance level of smart badge**
Patent Assignee: JAM M (JAMM-I)
Inventor: **JAM M**
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 20020152211	A1	20021017	US 2001836952	A	20010417	200337	B

Priority Applications (No Type Date): US 2001836952 A 20010417
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20020152211	A1		9	G06F-007/00	

Abstract (Basic): US 20020152211 A1
      NOVELTY - Several clearance levels are assigned to database
information and each smart badge within the set of visible smart badges
(210,212,214,216). The smart badges having lowest clearance level are
identified, and the smart badge wearers are allowed to access database
information having clearance level not higher than lowest clearance
level.
      DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the
following:
      (1) Computer-usable medium storing instructions for context-aware
computer management; and
      (2) System for context-aware computer management.
      USE - For managing context-aware computer used for maintaining
patient records in hospitals.
      ADVANTAGE - Provides access only to information to authorized smart
badge wearers based on clearance levels of the smart badge wearers.
Enables monitoring and communicating with all the smart badges within a
predefined area instead of smart badge wearers very close to or in
front of the system.
      DESCRIPTION OF DRAWING(S) - The figure shows the data flow diagram
of system for context-aware computer management.
      Smart badges (210,212,214,216)
      pp; 9 DwgNo 2/3
Title Terms: CONTEXT; AWARE; COMPUTER; MANAGEMENT; METHOD; HOSPITAL; ALLOW;
  SMART; BADGE; WEAR; ACCESS; DATABASE; INFORMATION; CLEARANCE; LEVEL; HIGH
  ; LOW; CLEARANCE; LEVEL; SMART; BADGE
Derwent Class: S05; T01; W05
International Patent Class (Main): **G06F-007/00**
File Segment: EPI

4/5/2   (Item 2 from file: 350)

011204190   **Image available**
WPI Acc No: 1997-182114/199717
XRPX Acc No: N97-149825
  **High speed two way data communication modem - converts signals received
  in first frequency band to second band and converts frequency of signals
  to be transmitted**
Patent Assignee: HEWLETT-PACKARD CO (HEWP)
Inventor: CHIU R; **JAM M**
Number of Countries: 005 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week

EP 765061	A2	19970326	EP 96114645	A	19960912	199717	B
JP 9172452	A	19970630	JP 96252100	A	19960924	199736	
US 5787483	A	19980728	US 95532923	A	19950922	199837	
JP 3279487	B	20020430	JP 96252100	A	19960924	200230	

Priority Applications (No Type Date): US 95532923 A 19950922
Cited Patents: No-SR.Pub
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 765061	A2	E	61	H04L-029/06	
Designated States (Regional): DE FR GB					
JP 9172452	A		52	H04L-012/46	
US 5787483	A			G06F-012/00	
JP 3279487	B		54	H04L-012/46	Previous Publ. patent JP 9172452

Abstract (Basic): EP 765061 A
     The modem has a tuner which is connected to a transmission medium
and tuned to receive a first signal on a first channel of the
transmission medium. A front end processor is connected to the tuner to
convert the first signal into first and second bit streams. A
transmitter is connected to the transmission medium to transmit a
second signal on a second channel of the transmission medium. An
upstream controller is connected to the transmitter to transmit data
packets based on the timing.
     Preferably, a parallel processing system includes two state machine
controlled devices and two register set addressable by the devices. A
microprocessor is connected to the register sets. A memory access
arbitration unit is connected to the devices and to a shared memory to
allow only one device to access the memory at a time. A register file
is connected to the microprocessor and to the first and second devices.

     USE/ADVANTAGE - High speed two way video, audio and data
communication on computer network. Allows client stations in network to
communicate with signal conversion system. Allows several devices
access to shared memory in parallel.
     Dwg.1/18
Title Terms: HIGH; SPEED; TWO; WAY; DATA; COMMUNICATE; MODEM; CONVERT;
  SIGNAL; RECEIVE; FIRST; FREQUENCY; BAND; SECOND; BAND; CONVERT; FREQUENCY
  ; SIGNAL; TRANSMIT
Derwent Class: W01
International Patent Class (Main): **G06F-012/00** ; H04L-012/46; H04L-029/06
International Patent Class (Additional): **G06F-009/38** ; **G06F-009/46** ;
  H04L-012/02; H04L-012/28; H04L-012/44
File Segment: EPI

 4/5/3   (Item 3 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.

011204184   **Image available**
WPI Acc No: 1997-182108/199717
XRPX Acc No: N97-149819
  **Two way high speed data communication cable network - has conversion
  system which transmits data in first frequency band and receives data in
  second and uses synchronisation signals in client station**
Patent Assignee: HEWLETT-PACKARD CO (HEWP)
Inventor: CHIU R; **JAM M**
Number of Countries: 005 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 765055	A2	19970326	EP 96114644	A	19960912	199717	B
JP 9135235	A	19970520	JP 96252108	A	19960924	199730	
US 5784597	A	19980721	US 95532918	A	19950922	199836	
US 5883901	A	19990316	US 95532918	A	19950922	199918	
			US 97972149	A	19971117		

Priority Applications (No Type Date): US 95532918 A 19950922; US 97972149 A

19971117
Cited Patents: No-SR.Pub
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 765055	A2	E	63	H04L-012/28	
Designated States (Regional): DE FR GB					
JP 9135235	A		52	H04L-005/00	
US 5883901	A			H04J-003/06	Div ex application US 95532918
					Div ex patent US 5784597
US 5784597	A			H04N-007/14	

Abstract (Basic): EP 765055 A
        The computer network for high speed data communication has a data
    transmission cable with a root and at least one leaf node. A signal
    conversion system (SCS) is attached to the root. At least one client
    station is attached to a distinct leaf node. The signal conversion
    system (SCS) has a transmitter which transmits down stream data onto
    the cable on a down stream channel in a second frequency band and a
    receiver which receives data from client stations on an up stream
    channel in a second frequency band. The downstream data includes
    synchronisation signals.
        Each client station has a receiver that receives data on the first
    frequency band. A transmitter transmits data on a second frequency band
    according to synchronisation signals received on the first frequency
    band.
        USE/ADVANTAGE - Computer network. High speed two-way video, audio
    and data communication. Allows client stations in network to
    communicate with signal conversion system. Allows several devices to
    have access to shared memory in parallel.
        Dwg.1/18
Title Terms: TWO; WAY; HIGH; SPEED; DATA; COMMUNICATE; CABLE; NETWORK;
    CONVERT; SYSTEM; TRANSMIT; DATA; FIRST; FREQUENCY; BAND; RECEIVE; DATA;
    SECOND; SYNCHRONISATION; SIGNAL; CLIENT; STATION
Derwent Class: W01
International Patent Class (Main): H04J-003/06; H04L-005/00; H04L-012/28;
    H04N-007/14
International Patent Class (Additional): **G06F-001/12** ; H04L-005/26;
    H04L-007/00; H04L-012/40; H04L-012/413
File Segment: EPI

```
Set      Items    Description
S1      564029    BADGE? OR BUTTON? OR PIN OR PINS OR FOB OR FOBS OR TOKEN? -
                  OR ID OR IDCARD? OR IDENTIFICATION()CARD? OR IDS
S2        7344    S1(3N)(SMART? OR INTELLIGENT? OR CHIP? OR IC OR INTEGRATED-
                  ()CIRCUIT? OR TRANSPONDER?)
S3      285992    WIRELESS? OR RF  OR RADIOFREQ? OR IR OR INFRARED? OR WIFI -
                  OR WAP OR BLUETOOTH? OR CELLULAR?
S4     1838031    ACCESS? OR CLEARANCE? OR PERMISSION? OR PERMIT? OR ALLOW?
S5      167002    (MULTIPL? OR SEVERAL OR VARIOUS OR VARIETY OR MANY OR PLUR-
                  AL?)(3N)(LEVEL? OR TIER? OR TYPE?) OR MULTILEVEL? OR MULTILAY-
                  ER?
S6     3425043    NETWORK? OR SYSTEM? OR LAN? OR DATABASE? OR DATA()(BASE? OR
                  BANK?) OR DATABANK? OR WEBSITE? OR WEBPAGE? OR WEB()(SITE? OR
                  PAGE?) OR INTRANET?
S7      547163    BEACON? OR TRANSMITTER? OR TRANSPONDER? OR ANTENNA? OR REC-
                  EIVER?
S8           2    S2 AND S3 AND S4 AND S5
S9          77    S2 AND S3 AND S7
S10          0    S9 AND S5
S11         36    S9 AND S6
S12         54    S2 AND S3 AND S4
S13          2    S2 AND S4(2N)S5
S14          4    S2 AND S4 AND S5 AND S7
S15         16    S9 AND IC=(G06F? OR H04L?)
S16         25    (S11 OR S12) AND IC=(G06F? OR H04L?)
S17         37    S8 OR S13 OR S14 OR S15 OR S16
S18         28    S17 NOT AD>20010417
S19         28    IDPAT (sorted in duplicate/non-duplicate order)
S20         28    IDPAT (primary/non-duplicate records only)
File 347:JAPIO Oct 1976-2003/Jul(Updated 031105)
         (c) 2003 JPO & JAPIO
File 350:Derwent WPIX 1963-2003/UD,UM &UP=200374
         (c) 2003  Thomson Derwent
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DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.

015330659   **Image available**
WPI Acc No: 2003-391594/200337
XRPX Acc No: N03-312801
   Context-aware computer management method in hospital, involves allowing smart   badge **wearers to access database information having clearance levels not higher than lowest clearance level of** smart   badge
Patent Assignee: JAM M (JAMM-I)
Inventor: JAM M
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 20020152211	A1	20021017	US 2001836952	A	20010417	200337	B

Priority Applications (No Type Date): US 2001836952 A 20010417
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 20020152211	A1		9	G06F-007/00	

Abstract (Basic): US 20020152211 A1
     NOVELTY - **Several clearance levels** are assigned to database
information and each **smart badge** within the set of visible **smart badges** (210,212,214,216). The **smart badges** having lowest clearance
level are identified, and the **smart badge** wearers are allowed to
access database information having clearance level not higher than
lowest clearance level.
     DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the
following:
     (1) Computer-usable medium storing instructions for context-aware
computer management; and
     (2) System for context-aware computer management.
     USE - For managing context-aware computer used for maintaining
patient records in hospitals.
     ADVANTAGE - Provides access only to information to authorized
smart badge wearers based on clearance levels of the **smart badge**
wearers. Enables monitoring and communicating with all the **smart badges** within a predefined area instead of **smart badge** wearers
very close to or in front of the system.
     DESCRIPTION OF DRAWING(S) - The figure shows the data flow diagram
of system for context-aware computer management.
     Smart badges (210,212,214,216)
     pp; 9 DwgNo 2/3
Title Terms: CONTEXT; AWARE; COMPUTER; MANAGEMENT; METHOD; HOSPITAL; ALLOW;
  SMART; BADGE; WEAR; ACCESS; DATABASE; INFORMATION; CLEARANCE; LEVEL; HIGH
  ; LOW; CLEARANCE; LEVEL; SMART; BADGE
Derwent Class: S05; T01; W05
International Patent Class (Main): G06F-007/00
File Segment: EPI

DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.

014779699
WPI Acc No: 2002-600405/200265
XRPX Acc No: N02-475903
   Infrared **remote controller**
Patent Assignee: ACER COMPUTER CO LTD (ACER-N)
Inventor: CHEN J; HUA Y; LIANG D
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
CN 1351294	A	20020529	CN 2000130315	A	20001030	200265	B

Priority Applications (No Type Date): CN 2000130315 A 20001030
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
CN 1351294	A			G06F-013/10	

Abstract (Basic): CN 1351294 A
     NOVELTY - An **infrared** remote controller is composed of an
infrared receiver in the computer, an **infrared transmitter** , a
chip set with **pins** for **infrared receiver** and sequence interfaces
for connecting to CPU and peripherals of computer, switching circuit
connected between sequence interface pins and **infrared receiver** for
transmitting the **receiver** signals to the sequence interface pins, and
an application program stored in CPU for providing control signal to
actuate switching circuit. Its advantages are only used of a single
receiver for receiving the signals in different encode modes, and
saving space.
     DwgNo 0/0
Title Terms: **INFRARED** ; REMOTE; CONTROL
Derwent Class: T01; W03
International Patent Class (Main): **G06F-013/10**
File Segment: EPI

DIALOG(R)File 350:Derwent WPIX

014107292   **Image available**
WPI Acc No: 2001-591504/200167
XRPX Acc No: N01-440728
   Data token **for use as** smart **card, includes battery which is
   disconnected from radio frequency generating device in the absence input
   radio frequency signals**
Patent Assignee: MAGNEX INC (MIGN-N); MAGNEX CORP (MAGN-N)
Inventor: LIN F; ZHU S
Number of Countries: 029 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 1126407	A2	20010822	EP 2001301369	A	20010216	200167	B
JP 2001273056	A	20011005	JP 200140579	A	20010216	200173	
CN 1313675	A	20010919	CN 2001110812	A	20010216	200202	
TW 513674	A	20021211	TW 2001103615	A	20010226	200353	

Priority Applications (No Type Date): US 2000506652 A 20000217
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 1126407	A2	E	6	G06K-019/07	

   Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT
   LI LT LU LV MC MK NL PT RO SE SI TR

JP 2001273056	A		5	G06F-001/32	
CN 1313675	A			H03K-017/00	
TW 513674	A			G06K-019/07	

Abstract (Basic): EP 1126407 A2
     NOVELTY - A battery (17) is electrically disconnected from **RF**
   generating device (18), in the absence of input radio frequency (**RF**)
   signal. The battery (17) is connected to **RF** device when a frequency
   selector (12) senses radio frequency signals.
     USE - For use as smart card for entering secure portal, location
   transponder , identifier age for cargo container, **transponder** tag for
   domestic or wild animal, identifies tag for items in supermarket, sonar
   responsive device for flight recorder. Also for use in **RF** checkout
   system , credit card charging **system** , debit card **system** , fare
   collection **system** and secure **access** facility.
     ADVANTAGE - Since the battery is disconnected in the absence of
   input **RF** signals, the operational range and lifetime of the data
   token is increased.
     DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of
   the data token.
     Frequency selector (12)
     Battery (17)
      RF generating device (18)
     pp; 6 DwgNo 1/2
Title Terms: DATA; TOKEN; SMART; CARD; BATTERY; DISCONNECT; RADIO;
  FREQUENCY; GENERATE; DEVICE; ABSENCE; INPUT; RADIO; FREQUENCY; SIGNAL
Derwent Class: T04; T05; U24; X16
International Patent Class (Main): **G06F-001/32** ; G06K-019/07; H03K-017/00
International Patent Class (Additional): G06K-019/077; H02J-007/00
File Segment: EPI

DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.

013417724   **Image available**
WPI Acc No: 2000-589663/200056
XRPX Acc No: N00-436399
   Patient guide system **for use in hospitals, has information display unit
   which is characterized to give display priority to** wireless **signal
   received through** antenna **from ID reader**
Patent Assignee: INABA ENG KK (INAB-N)
Number of Countries: 001 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
JP 2000187691	A	20000704	JP 98376136	A	19981221	200056	B
JP 3074529	B2	20000807	JP 98376136	A	19981221	200056	

Priority Applications (No Type Date): JP 98376136 A 19981221
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 2000187691	A		6	G06F-017/60	
JP 3074529	B2		5	G06F-017/60	Previous Publ. patent JP 2000187691

Abstract (Basic): JP 2000187691 A
     NOVELTY - A patient is provided with a pair of ID cards (1)
   registered with same ID numbers. Card reader (2) outputs **wireless**
   signal to display unit (4) via **antenna** (3). Display unit (4) of
   patient guide **system** with pocket bell pager data display function
   displays preset or arbitrary selection messages. The display function
   is characterized to give priority to **wireless** signal from card reader
   to display information.
     USE - For use in hospitals.
     ADVANTAGE - Since **IC** card and **ID** number is provided, the delay
   in correspondence is avoided, due to prevention of human operation.
   Hence offers an improved patient guide **system** and reduces labor cost.

     DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of
   patient guide **system** .
     ID card (1)
     Card reader (2)
     Wireless   antenna (3)
     Information display unit (4)
     pp; 6 DwgNo 1/7
Title Terms: PATIENT; GUIDE; **SYSTEM** ; HOSPITAL; INFORMATION; DISPLAY; UNIT
   ; DISPLAY; PRIORITY; **WIRELESS** ; SIGNAL; RECEIVE; THROUGH; **ANTENNA** ; ID;
   READ
Derwent Class: P85; S05; T01; T05; W05
International Patent Class (Main): **G06F-017/60**
International Patent Class (Additional): **G06F-019/00** ; G09G-005/00;
   H04Q-007/14
File Segment: EPI; EngPI

DIALOG(R)File 350:Derwent WPIX
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011302630   **Image available**
WPI Acc No: 1997-280535/199725
XRPX Acc No: N97-232477
 Information management and security system **for confidential business,
 finance, military or intelligence data – has host** network **element
 comparing identification of** transponder **with authorised identification
 codes stored in memory**
Patent Assignee: TEXAS INSTR INC (TEXI)
Inventor: NERLIKAR V M
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5629981	A	19970513	US 94283081	A	19940729	199725	B

Priority Applications (No Type Date): US 94283081 A 19940729
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5629981	A		20	H04L-009/00	

Abstract (Basic): US 5629981 A
      The **system** includes an RFID **transponder badge** (302) and an
   RF reader transceiver (315) which is associated with a host peripheral
   or a **network** . The **RF** reader transceiver automatically identifies
   and verifies authorisation of the RFID **transponder badge** holder via
   a 'handshake' prior to **allowing access** to the host peripheral.
      The energy generated by the transmission of the interrogation
   signal from the **RF** reader provides a power source which is
   accumulated and then used to activate a **transponder** (304) response
   from the badge. The **RF** reader/transceiver writes the **access**
   transaction on either the RFID **transponder badge** and/or the host
   peripheral **database** or the **network** controller.
      ADVANTAGE – **System** is compatible with present office technology,
   yet will be compatible with potential integrated office equipment,
   networks and architectures of the future. Provides instantaneous,
   multiple secure **access** and minimises total life-cycle costs of
   managing secure information.
      Dwg.1/7
Title Terms: INFORMATION; MANAGEMENT; SECURE; **SYSTEM** ; CONFIDE; BUSINESS;
   FINANCIAL; MILITARY; INTELLIGENCE; DATA; HOST; **NETWORK** ; ELEMENT;
   COMPARE; IDENTIFY; **TRANSPONDER** ; AUTHORISE; IDENTIFY; CODE; STORAGE;
   MEMORY
Derwent Class: W01; W02; W06
International Patent Class (Main): **H04L-009/00**
File Segment: EPI

DIALOG(R)File 350:Derwent WPIX
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010191263   **Image available**
WPI Acc No: 1995-092517/199513
XRPX Acc No: N95-073144
  Passive transponder **for** RF - ID system **- forms CRC dependent upon
  security code that can only be altered with correct combination of
  selective address and time code**
Patent Assignee: TEXAS INSTR DEUT GMBH (TEXI)
Inventor: MEIER H
Number of Countries: 006 Number of Patents: 005
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 640939	A2	19950301	EP 94113148	A	19940823	199513	B
US 5430447	A	19950704	US 93110454	A	19930823	199532	
EP 640939	A3	19960110	EP 94113148	A	19940823	199620	
EP 640939	B1	20000405	EP 94113148	A	19940823	200021	
DE 69423830	E	20000511	DE 623830	A	19940823	200030	
			EP 94113148	A	19940823		

Priority Applications (No Type Date): US 93110454 A 19930823
Cited Patents: No-SR.Pub; EP 309195; US 4454600; US 5022080
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 640939	A2	E	8	G06K-019/073	

    Designated States (Regional): DE FR GB IT NL

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5430447	A		7	G01S-013/78	
EP 640939	A3			G06K-019/073	
EP 640939	B1	E		G06K-019/073	

    Designated States (Regional): DE FR GB IT NL

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
DE 69423830	E			G06K-019/073	Based on patent EP 640939

Abstract (Basic): EP 640939 A
      The **transponder** operates from the charge built up during
  interrogation. The **transponder** forms a CRC code (16) from data
  received using a segment code stored in its memory. If the CRC is not
  correct the **transponder** is discharged.
      In order to reprogram the segment code, the writing unit must also
  supply a selective address and a block check character (BCC). The
  selective address is compared (18) within the **transponder** and
  provides a time code that limits the time at which the **transponder**
  can be reprogrammed.
      ADVANTAGE - Provides unique identification for **transponder** via
  number of security checks and measures.
      Dwg.1/4
Title Terms: PASSIVE; **TRANSPONDER ; RF ;** ID; **SYSTEM ;** FORM; CRC; DEPEND;
  SECURE; CODE; CAN; ALTER; CORRECT; COMBINATION; SELECT; ADDRESS; TIME;
  CODE
Index Terms/Additional Words: **CYCLIC_REDU ND ANCY_C ;** REDUNDANCY; CHECK
Derwent Class: T01; T05; T07; W02; W06
International Patent Class (Main): G01S-013/78; G06K-019/073
International Patent Class (Additional): G06K-001/12; G06K-007/00;
  G06K-007/08; **H04L-009/32**
File Segment: EPI

009438307   **Image available**
WPI Acc No: 1993-131826/199316
XRPX Acc No: N93-100400
   **Computer workstation with associated identification card reader - has
   restricted** access **to all or some programs unless approp. card is
   inserted in reader.**
Patent Assignee: KONINK NEDERLAND PTT NV (NEPO)
Inventor: SNEL E M
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
NL 9101506	A	19930401	NL 911506	A	19910906	199316	B

Priority Applications (No Type Date): NL 911506 A 19910906
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
NL 9101506	A		13	G06F-001/00	

Abstract (Basic): NL 9101506 A
      The workstation consists of a Central Processing Unit (1), Visual
   Display Unit (2), keyboard (3), mouse (4) and a card reader (5). The
   identification   card (6) is a '' **smart** card'', i.e. one which
   contains an integrated circuit. After a successful log on procedure,
   the computer checks that the card is still in place at regular
   intervals.
      Signals from the card are coupled to the reader by non-galvanic
   means, e.g. electromagnetic induction, ultrasound or **infrared** . To
   ensure that the card is removed at the end of a session, the same card
   is needed to operate an exit lock to the room containing the
   workstation.
      Dwg.1/1
Title Terms: COMPUTER; ASSOCIATE; IDENTIFY; CARD; READ; RESTRICT; **ACCESS** ;
   PROGRAM; CARD; INSERT; READ
Derwent Class: T01; T04; T05
International Patent Class (Main): **G06F-001/00**
International Patent Class (Additional): G07F-007/08
File Segment: EPI

L Number	Hits	Search Text	DB	Time stamp
4	513	(determin$3 or verif$3) near5 ((security or clearance) near3 (level or degree or status))	USPAT; EPO; JPO; DERWENT	2003/11/20 14:06
5	1400	(door or gate or entrance) near7 (badge or tag)	USPAT; EPO; JPO; DERWENT	2003/11/20 14:07
6	1	((determin$3 or verif$3) near5 ((security or clearance) near3 (level or degree or status))) and ((door or gate or entrance) near7 (badge or tag)) and (wireless or transponder or RFID)	USPAT; EPO; JPO; DERWENT	2003/11/20 14:10
7	1	(((determin$3 or verif$3) near5 ((security or clearance) near3 (level or degree or status))) and ((door or gate or entrance) near7 (badge or tag)) and (wireless or transponder or RFID)) and database	USPAT; EPO; JPO; DERWENT	2003/11/20 14:10